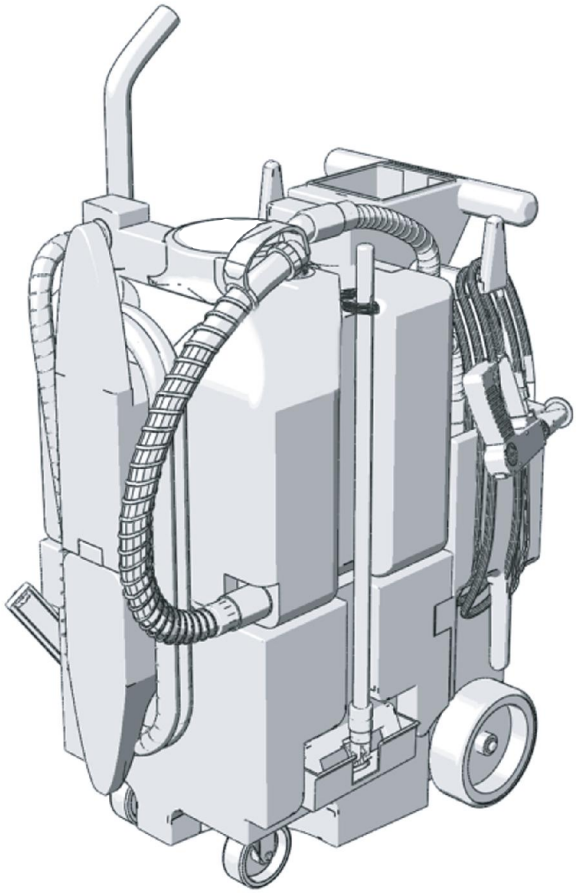
# KaiVac®1700 Series

# Operator and Parts Manual

*KaiVac 1700 Kaivac Manual 1715 Serial# 45  1750 Serial# 8001*



kaivac cleaning systems™

*Complete Cleaning For Healthy Results™*

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# Read First

**INSTALL DATE**

Please fill out card for future records

Install date_____
Serial No._____

Read this manual prior to operation.
This machine will operate at its optimal efficiency if:

- The machine is operated as described in this manual.
- The machine is maintained properly and regularly-per maintenance instructions.
- The machine is maintained with manufacturer parts only.

Carefully unpack and inspect your new KaiVac cleaning machine for shipping damage. Each unit is tested and thoroughly inspected before shipping. For instructions regarding shipping damage, contact Kaivac, Inc. immediately All returns must have a Return Authorization Number (RAN), which is available by calling Kaivac, Inc. Customer Service Department. Remember to protect your investment by registering your Warranty form on page ii.

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# Limited Warranty Protection Plan

The KaiVac has been engineered and tested to provide long lasting performance. This warranty covers defects in workmanship or materials under normal use and service from the date of purchase.

Kaivac Inc. warrants the following components to be free from defects in materials and workmanship for these time periods:

1.) KV1750 Extended Warranty for end users who use only Kaivac chemicals for the life of the machine.
- 5 years on rotationally molded parts
- 3 years on other parts (excluding wear items)
- 1 year on labor

2.) KV1715 Extended Warranty for end users who use only Kaivac chemicals for the life of the machine
- 5 years on rotationally molded parts
- 1 years on other parts (excluding wear items)
- 1 year on labor

2a.) Standard Warranty (for approved non-Kaivac chemicals)
- 1 year parts and labor

3.) Chemicals that have not been approved by Kaivac. (If uncertain, please call Kaivac to check.)
- No warranty

All KaiVac replacement parts are guaranteed for 90 days from the date of installation. Normal wear items such as wheels, hoses, seals, gaskets, cords, casters, squeegees and GFCI are excluded from warranty coverage.

All warranty claims must be accompanied by a Return Authorization Number (RAN), which is available by calling the Kaivac, inc. Customer Service Department. No returns will be accepted without a RAN.

This warranty does not apply to return freight costs, damage or defect caused by accident, negligence, misuse, fire or repair done by anyone other than a Kaivac, Inc. authorized repair center. In no event shall Kaivac, Inc. be liable for incidental or consequential damages, or any damages to persons or propert .

Please Note: Under no circumstances will the seller be liable for any loss, damage, expenses or consequential damages arising in connection with the use or inability to use

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# Warranty Registration Form

To be completed and mailed or faxed by the customer purchasing equipment.
Return this warranty card within ten days of purchase.

Purchased By:

Name _____ Title _____

Company _____

Street Address _____

City _____ State _____ Zip Code _____

Phone Number _____ Fax _____

Date Purchased ____/____/____ Name of Distributor_____

I would like to receive updated information Yes____ No ____

Email address:_____

- ☐ KaiVac® 1715
- ☐ KaiVac® 1750
- ☐ KaiVac® 1215
- ☐ KaiVac® 2150

Serial Number _____

## Type of Business

- ☐ School/University
- ☐ Hospital/Health Care
- ☐ Contract Cleaner
- ☐ Industrial
- ☐ Office
- ☐ Other _____

## Intended Uses (check all that apply):

- ☐ Restroom Cleaning
- ☐ Floor Stripping
- ☐ Kitchen Cleaning
- ☐ Carpet Extraction
- ☐ Cleaning Around Machinery
- ☐ Stairwell Cleaning
- ☐ Locker and Shower Room
- ☐ Hallway Cleaning
- ☐ Classroom Cleaning
- ☐ Other _____

Thank you for registering for our warranty program. As our way of saying thanks, we'd like to send you a free microfiber KaiTowel™.

Please return completed forms to:

Kaivac, Inc.
401 S. Third Street
Hamilton, OH 45011

Or Fax to: (513) 887-4601

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# IMPORTANT SAFETY INSTRUCTIONS
# SAVE THESE INSTRUCTIONS

---

# CAUTION

To Reduce the Risk of injury, Read Operating Instructions Carefully Before Using

# ⚠ WARNING

Risk of injection or injury to Persons - Do Not Direct Discharge Stream at Persons

# ⚠ WARNING ⚡

## RISK OF ELECTROCUTION

- Connect to a properly grounded outlet. Do Not Remove Ground Pin
- Inspect Cord Before Using - Do Not Use If Cord Is Damaged
- Keep All Conections Dry And Off The Ground
- Do not Touch Plug With Wet Hands
- This Product Is Provided With A Ground Fault Circuit Interrupter Built Into The Power Cord. If Replacement Of The Plug Or Cord Is Needed, Use Only Identical Replacement Parts.
- Test The Ground Fault Circuit Interrupter (GFCI) Before Each Use.
- Do not close a door on the cord or pull the cord around sharp edges or corners.
- Do not run over the cord.
- Keep the cord away from heated surfaces.
- Do not spray liquid from the KaiVac onto electrical outlets or on any electrical devices.
- Turn off the unit before unplugging.
- Do not pull on the cord to unplug. Grasp the plug at the outlet and pull.
- Read Instruction Manual Before Using

## Grounding Instructions

THE KAIVAC MUST BE GROUNDED. If it should malfunction or stop working, grounding provides a path of least resistance for the electrical current and reduces the risk of electrical shock. The KaiVac is equipped with a ground fault circuit interrupter (GFCI) to further reduce danger of electric shock. It must be maintained and tested regularly. An equipment grounding cord and plug is included with the unit. The plug must be inserted in an appropriate outlet that has been properly installed and grounded in accordance with all local codes and ordinances. Cutting off the ground wire or using a cord with an ungrounded plug will void the warranty on the unit, and Kaivac, Inc. will NOT accept responsibility for the unit.

Improper connection of the equipment grounding cord can result in the risk of electrical shock. Ask a qualified electrician or service person to check the outlet grounding if you are unsure. Do not modify the plug provided with the KaiVac. If it will not fit the outlet, have a properly grounded outlet installed by a qualified electrician.

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# IMPORTANT SAFETY INSTRUCTIONS
# SAVE THESE INSTRUCTIONS

## ⚠ WARNING

**When using this product basic precautions should always be followed, including the following:**

- Read all the instructions before using the product.
- To reduce the risk of injury, close supervision is necessary when a product is used near children.
- Know how to stop the product and bleed pressures quickly. Be thoroughly familiar with the controls.
- Stay alert – watch what you are doing.
- Do not operate the product when fatigued or under the influence of alcohol or drugs.
- Keep operating area clear of all persons
- Do not overreach or stand on unstable support. Keep good footing and balance at all times.
- Follow the maintenance instructions specified in the manual.

**Personal Protection**

- it is recomended to wear proper personal protective equipment as required by the chemical product label instructions used in conjunction with the KaiVac.

**FOR INDOOR USE ONLY**

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# OPERATION INSTRUCTIONS
# SAVE THESE INSTRUCTIONS

## Inspection

Carefully unpack and inspect your new KaiVac cleaning machine for shipping damage. Each unit is tested and thoroughly inspected before shipping. For instructions regarding any shipping damage, contact Kaivac Inc. immediately. All returns must have a Return Authorization Number (RAN), which is available by calling the Kaivac Inc. Technical Service Department.

### Equipment Use

- Use the equipment for the purposes specified by the manufacturer.
- Do not remove the float shutoff.
- Do not run the pump dry. This will void the machine warranty.
- Do not run hot water through the pump. This will void the warranty.
- Always test chemicals for compatibilty on surfaces to be cleaned.
- Always be sure the water tank and water line filters are clear of debris.
- Do not use to pick up flammable or combustible materials.
- Replace any damaged cords before use.
- See the S-I-M-P-L-E operation section for proper use of equipment.

### Chemical use

- Only use chemicals approved for use with the KaiVac. Use of non-Kaivac chemicals may cause machine damage and will reduce warranty periods. Turn chemical line off when not in use.
- Keep the appropriate chemical MSDS on hand at all times.
- Cleaning chemicals should not be put in the water tank (with the exception of KaiDri in small amounts). Chemicals in the water tank can harm operator and machine because:
    - Chemicals in the water tank must pass through the pump, which may cause premature pump failure.
    - Use of chemicals in the water tank voids the warranty.
    - Chemicals in the water tank will be aerosolized and may harm the operator.

### Training

- Proper training is required before using the KaiVac. Contact your authorized Kaivac Inc. distributor for training information.
- Instruction placards are attached to each KaiVac and should not be removed.
- These placards show proper cleaning procedures and safety precautions.

### Prevention of Water Damage to Buildings

The KaiVac is to be used on water resistant building surfaces only. These include concrete, terrazzo, ceramic tile and quarry tile.

The KaiVac may be used for stripping on vinyl composite tile floors, but daily cleaning of resilient flooring using the KaiVac is not recommended.

Never overflow the water tank or the vacuum recovery tank.

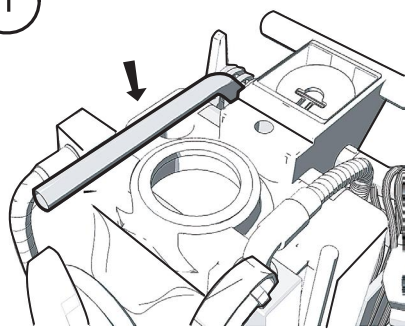
Discontinue use if any leaks occur in the KaiVac.

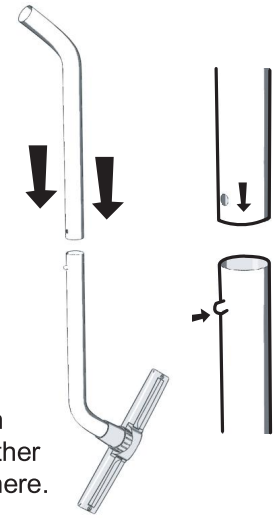
**CAUTION**: Prior to cleaning, always inspect area to ensure that the surfaces to be cleaned are water- safe. In addition, check for poor construction, damaged walls and floors, missing or damaged tiles or grout, missing or insufficient caulk, and loose wall coverings. If problems are discovered, resolve them prior to cleaning in order to avoid any harm that may result from exposure to water or cleaning solution.

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# Out of Box Setup Instructions

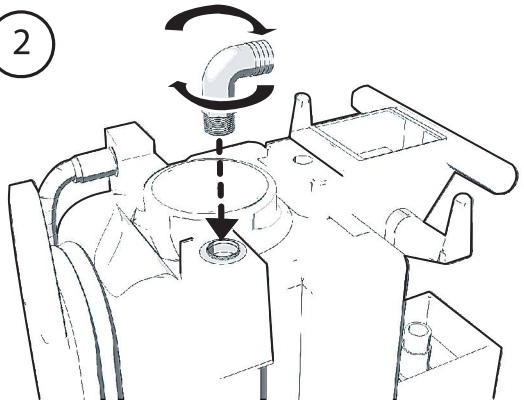
1





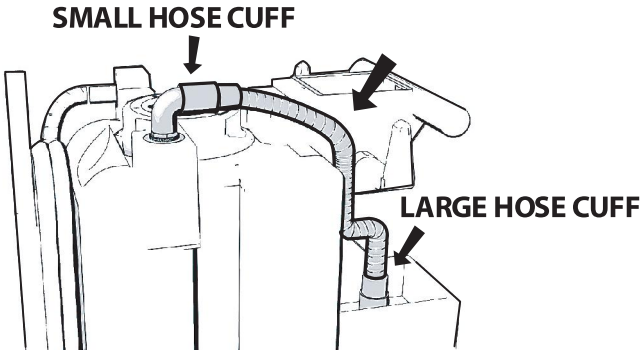
Remove vac wand section from top of machine and attach to remaining section of vac wand by sliding the sections together until the locking pin engages as shown here.

2



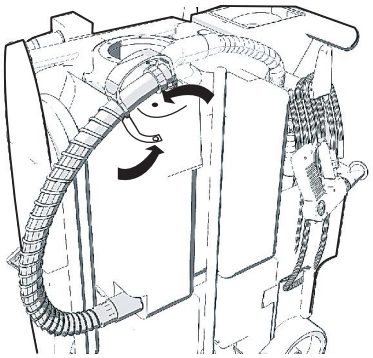
After removing machine from container, Attach the plastic elbow to the vac tank as shown above.

3



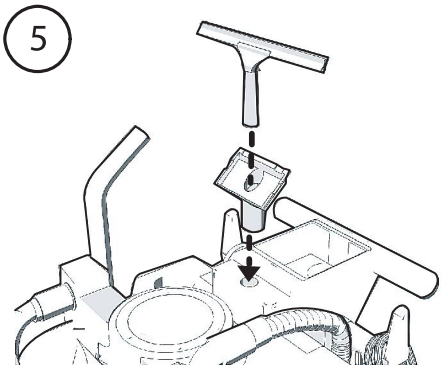

Attach vac motor hose to elbow and vac motor inlet as shown above.

4



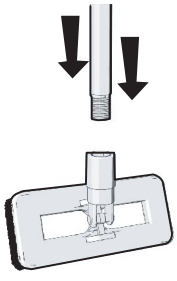
Snap dump hose to vac tank snap button strap on dump hose as shown above.

5



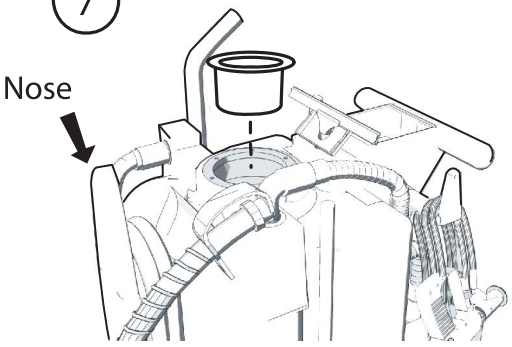
Remove the tools from the vac tank and place them in the appropriate locations as shown above.

6



Place the brush head onto the telescoping handle located on the left side of machine as shown above.

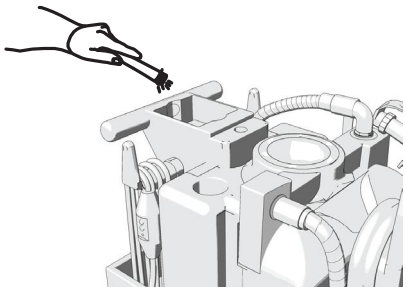
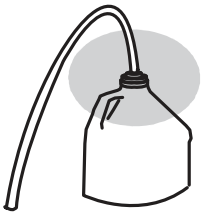
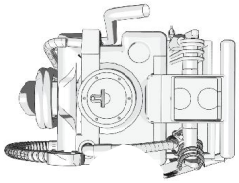
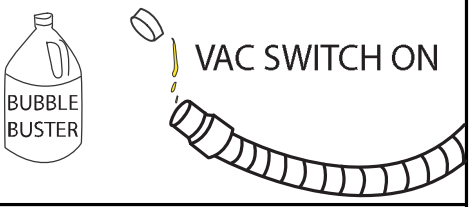
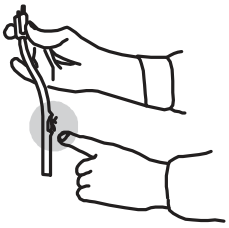
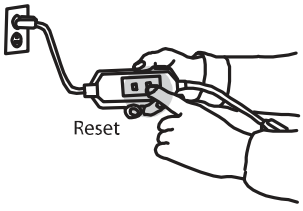
7




Make sure all tools are removed from vac tank and replace vac lid jug holder as shown above. Place tools in tote bag and hang bag over nose of machine.

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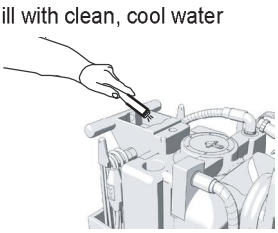
# Preparing your KaiVac for use

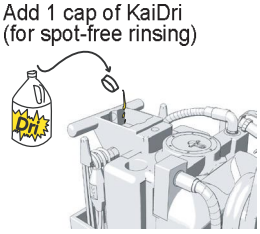
| | |
|---|---|
| 1. Fill machine with clean, cool water. |  |
| 2. Prepare the cleaning solution you will be using by attaching the chemical feed line and cap to the top of your chemical bottle and selecting the proper metering tip. (See placards for metering tip information.) |  |
| 3. Check machine for all tools and supplies needed to complete task. |  |
| 4. If using a cleaning product that has high foaming use a foam inhibitor to cut down on foam. Pour 2 capfulls of inhibitor in the vac hose with vac running to coat inside of hose. |  |
| 5. Check all hoses and spray lines for damage prior to use. If damage is found, do not continue until proper repairs are completed. |  |
| 6. Plug in machine and test GFCI (Ground Fault Circuit Interrupter) to ensure it is working properly. You are now ready. |  |

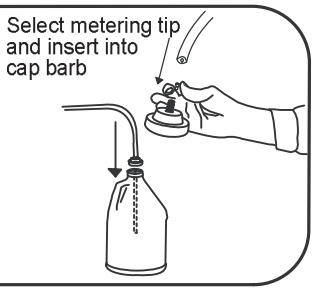
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# Operating your KaiVac using the S-I-M-P-L-E Process

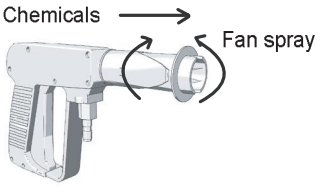
## Set-up



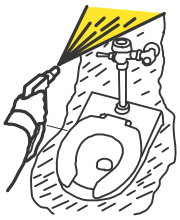



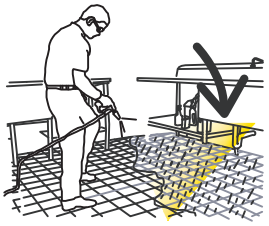

## Inject chemicals




LOW Pressure Mode



Fan spray



## Manual brush (optional)

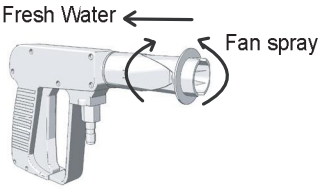


Manually brush heavily soiled areas

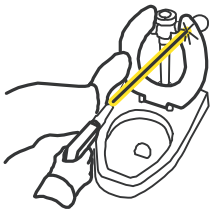




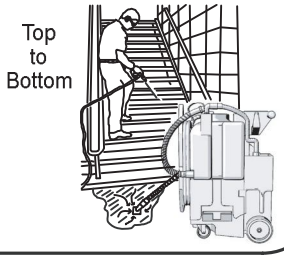
## Pressure wash and rinse




HIGH Pressure Mode

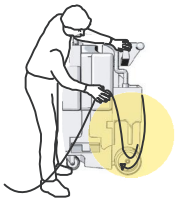


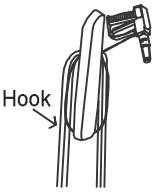
Pinpoint Spray




## Loop spray line



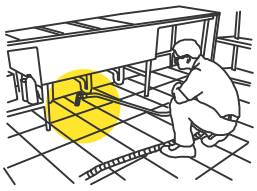






Adjust last loop (if needed)

## Extract and dry







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# Machine Maintenance

**⚠ CAUTION**

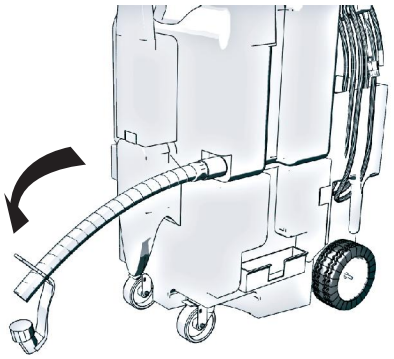
Always make sure machine is unplugged before lifting electric cover assembly.

| Item | Procedure |
|---|---|
| **Floor Squeegee** | ● Check condition of rubber squeegee blades and wheels on the floor tool.<br>● Rough floor surfaces will cause the blades and wheels to wear out more quickly. Replace as necessary. |
| **Spray Gun** | ● Check spray pattern. If spray pattern will not pinpoint, clean orifice by removing it with an Allen wrench and flushing. Replace if not pinpointing.<br>● If nozzle becomes difficult to move from high to low pressure lubricate nozzle with lithium grease. |
| **Pressure Hose** | ● Wipe clean after each use.<br>● Check for cuts or frays in the hose jacket, particularly at the end of the fittings. Replace hose if cuts are found. |
| **Water Tank** | ● Check condition of filter in water tank. Clean as needed.<br>● Empty the water tank to prevent mildew and bacteria growth. Empty tank by dipping the vacuum hose onto the water tank and transferring the water to the vacuum tank. |
| **Vacuum Tank** | ● Empty and flush vacuum tank.<br>● Clean and disinfect.<br>● Check the float shutoff screen to be sure it is not plugged up. A plugged filter screen restricts airflow and results in reduced suction. |
| **Leaks** | ● Be alert for leaks around hoses, fittings, spray wand, tanks or elsewhere.<br>● Discontinue use until leaks are repaired. |
| **Electrical System** | ● The ground fault circuit interrupter (GFCI) must be tested before each use.<br>● Electric cords must be inspected for tears or cuts in the insulation. |

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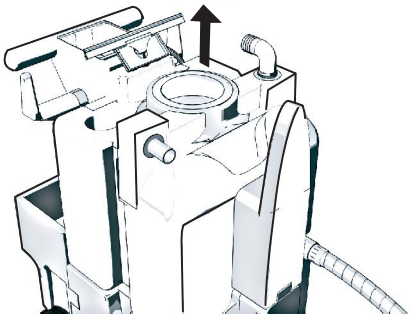
# Vac Tank Cleanout Instructions

1



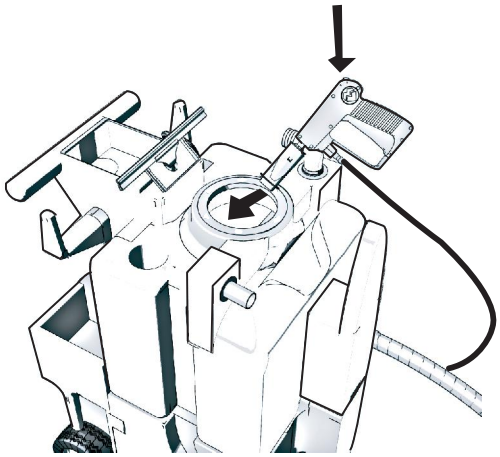
Disconnect dump hose and empty contents into proper location.

2



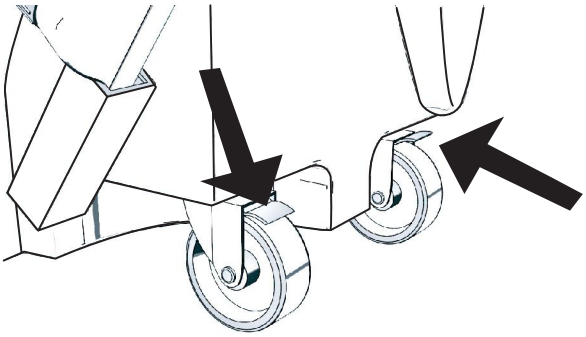
After dumping is complete, remove vac lid from vac tank.

3



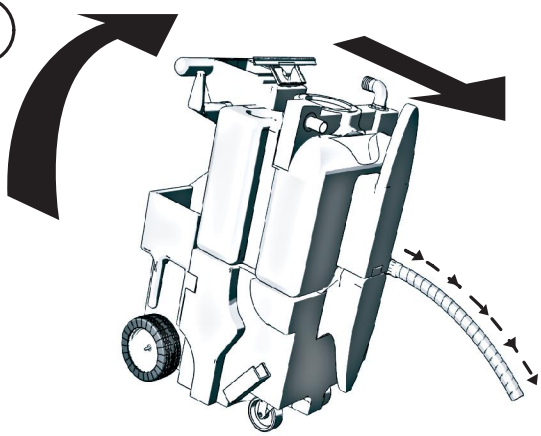
Using pressure gun or other water source, rinse inside of tank thoroughly.

4



After tank has been rinsed, lock the front caster wheels by pressing down on the locks as shown above.

5



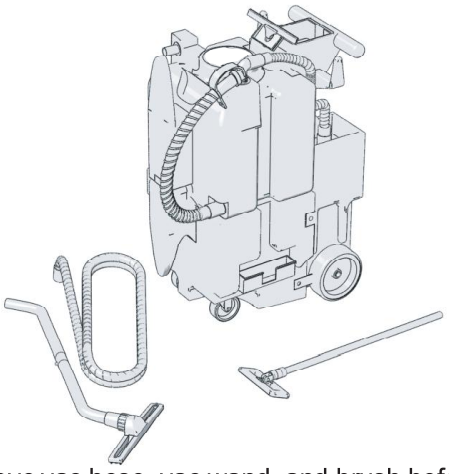
After caster wheels have been locked, tip the machine to the left and slightly forward to allow the remaining water to drain.

Re-attach dump hose and unlock wheels.

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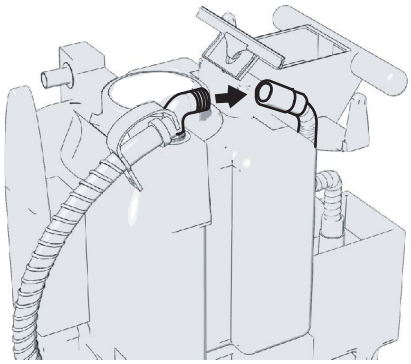
# Vac Tank Removal Instructions

1



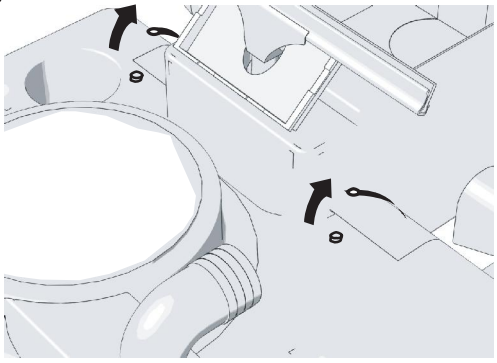
Remove vac hose, vac wand, and brush before removing vac tank.

2



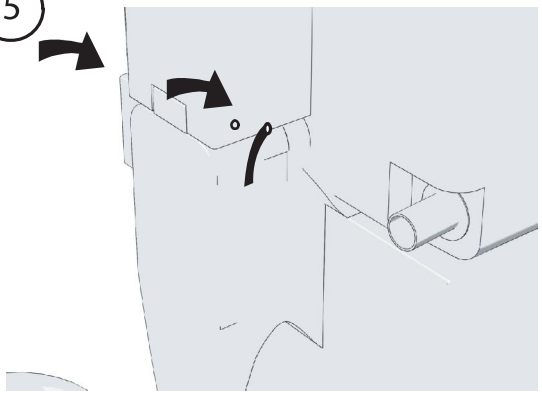
Disconnect vac inlet hose from 90 degree fitting on vac tank.

3



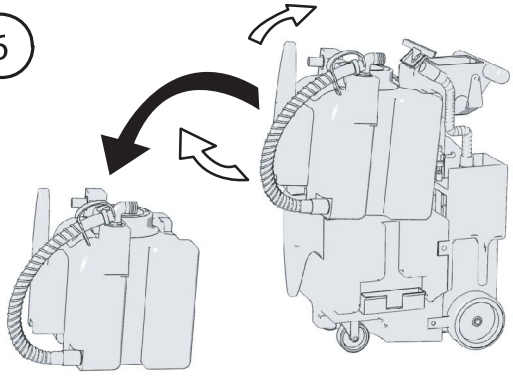
Un-snap straps holding the vac tank to the water tank upper assembly.

5



Un-snap straps holding the vac tank to the water tank lower assembly.

6



Slightly pull the bottom section of the vac tank out while tipping it backwards.

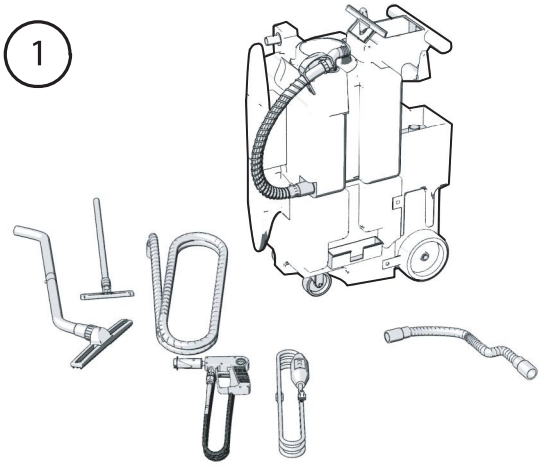
Lift and pull the vac tank away from the unit.

Repeat the steps backwards to replace tank.

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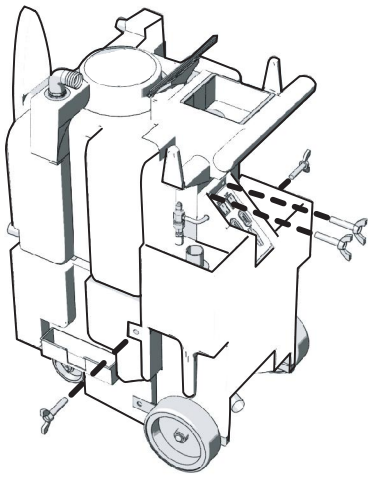
# Black Box Removal Instructions

1



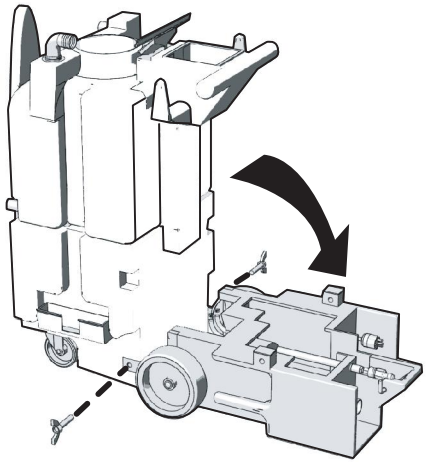
Remove all hoses, cords, and tools prior to black box removal.

2



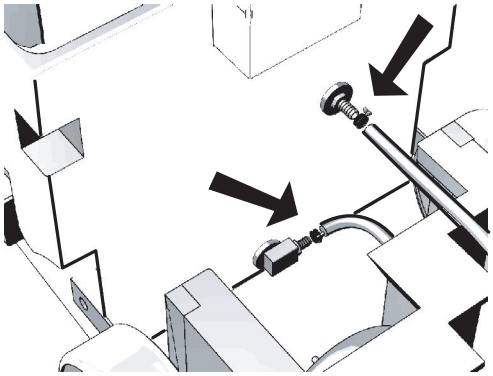
Loosen and remove the 4 wing and thumb bolts located at the top of the control panel and on the left and right of the black box mid section.

3



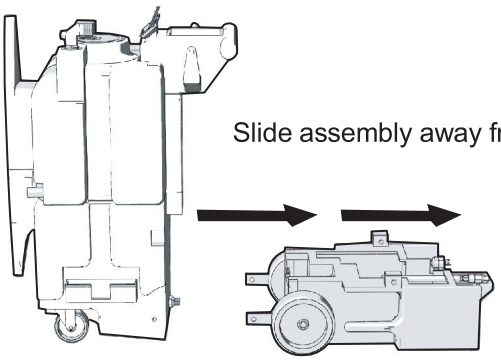
Tilt the black box assembly away from machine utill it rests on the floor. Next, remove the 2 axle strap wing bolts on either side of the machine behind the wheels.

5



Locate and disconnect the water line and return line behind the black box on the machine.

6



Slide assembly away from water tank.

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# Troubleshooting

**⚠ CAUTION**

Always make sure machine is unplugged before lifting electric cover assembly.

| Area | Problem | Possible Cause | Solution |
|---|---|---|---|
| **Electrical** | No power to pump or vac motor. | 1. Machine not plugged in.<br>2. Switch not “on.”<br>3. GFCI tripped.<br>4. Building circuit overloaded.<br>5. Switch wires loose.<br>6. Connections loose. | 1. Plug machine in.<br>2. Check switches for “on."<br>3. Test and reset GFCI.<br>4. Check and reset circuit.<br>5. Disconnect power and check for loose wire.<br>6. Disconnect power and check for loose wire under panel. |
| | Electrical burning smell. | 1. Vac motor brushes worn.<br>2. Vac motor hung up.<br>3. Pump motor hung up. | 1. Remove vac motor and repair.<br>2. Release pressure on hose and jog pump switch, or replace. |
| **Vacuum System** | No/Weak vacuum. | 1. Vac tank full.<br>2. Squeegee blades or wheels worn.<br>3. Float shutoff screen dirty.<br>4. Float ball stuck.<br>5. Damaged hose.<br>6. Dump hose plug missing.<br>7. Access lid not tight.<br>8. Vacuum hose plugged.<br>9. Too much liquid in vac hose.<br>10. Vac hose still wrapped.<br>11. Muffler plugged.<br>12. Leak in vac tank. | 1. Empty vac tank.<br>2. Replace wheels or blades and check periodically.<br>3. Wipe off float screen to clean.<br>4. Tap float and release/clean.<br>5. Cut and repair/replace.<br>6. Contact dealer and replace.<br>7. Tighten lid hand tight.<br>8. Flush hose to remove debris.<br>9. Allow air in when vacuuming.<br>10. Unwrap vac hose fully.<br>11. Remove HEPA filter and clean.<br>12. If repairable, clean and dry affected area and seal with silicone. |
| | Moisture from exhaust. | 1. Vac tank full.<br>2. Float shutoff missing.<br>3. Excessive foam in vac tank. | 1. Dump vac tank.<br>2. Replace.<br>3. Use defoamer. |
| **Blow Dry System** | No air flow. | 1. Hose disconnected. | 1. Reconnect hose. |
| | Moisture from nozzle. | 1. Water in blow hose. | 1. Dry blow line. |
| | Suction, not blow action. | 1. Vacuum hose connected to vac tank. | 1. Reconnect to vac motor exhaust hose. |
| **DVD System (optional)** | No power. | 1. Power cord not connected<br>2. Power switch not on. | 1. Plug cord into DVD player.<br>2. Turn switch on DVD player on. |
| | No picture. | 1. Screen is blank. | 1. Close and re-open lid. Play. |
| | No audio. | 1. No sound from player | 1. Check volume control knob. |

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# Troubleshooting

**⚠ CAUTION**

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| Area | Problem | Possible Cause | Solution |
|---|---|---|---|
| **High Pressure System** | No water from pump or low pressure. | 1. Out of water.<br>2. Gun nozzle plugged.<br>3. Air in pump (vapor lock).<br>4. Gun orifice missing.<br>5. Water tank filter plugged.<br>6. In-line bowl filter plugged.<br>7. Bowl filter lid loose.<br>8. Pressure hose damaged.<br>9. Quick disconnect leaking.<br>10. Injector plugged.<br>11. Pulse hose damaged.<br>12. Regulator failed.<br>13. Hose kinked.<br>14. Seals in pump need replaced. | 1. Fill water tank.<br>2. Remove orifice with Allen wrench and clean.<br>3. Use power prime technique.<br>4. Replace orifice.<br>5. Clean tank and filter.<br>6. Remove filter cover and clean.<br>7. Gently tighten bowl cover.<br>8. Repair or replace.<br>9. Tighten or replace.<br>10. Remove safety cap from chemical and blow small amounts of compressed air into line.<br>11. Repair or replace.<br>12. Replace.<br>13. Unkink and check for damage<br>14. Remove and replace seals. |
| | Bad fan pattern or pinpoint pattern on gun. | 1. Debris in nozzle.<br>2. Orifice damaged. | 1. Remove orifice with Allen wrench and clean.<br>2. Remove and replace. |
| **Chemical Injection System** | No chemical flow. | 1. Out of chemical.<br>2. Safety cap not secure.<br>3. Chemical valve "off."<br>4. Safety cap plugged.<br>5. Spray gun in wrong mode.<br>6. Metering tip plugged.<br>7. Injector plugged.<br>8. Air entering system.<br>9. Injector installed backwards. | 1. Refill chemical.<br>2. Check safety cap / tighten.<br>3. Check on / off valve.<br>4. Replace cap.<br>5. Make sure gun nozzle is pulled out away from gun chemical mode.<br>6. Check metering tip for clog.<br>7. Remove safety cap from chemical and blow small amounts of compressed air into line.<br>8. Check for air entering system around chemical lines or injector.<br>9. If fluttering or pulsing sound can be heard while spraying or when machine is running it is possible that your injector is in backwards. Remove and reinstall. |

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# Troubleshooting

**⚠ CAUTION**

Always make sure machine is unplugged before lifting electric cover assembly.

| Area | Problem | Possible Cause | Solution |
|---|---|---|---|
| **Chemical Injection System Con't.** | Not enough chemical flow. | 1. Metering tip plugged.<br>2. Wrong metering tip. | 1. Remove and clean.<br>2. Check and replace per chart. |
| | Chemical line blows off safety cap. | 1. Debris in injector. | 1. Remove safety cap from chemical and blow small amounts of compressed air into line. |
| | Water backflows into chemical bottle. | 1. Bad seat on injector check valve.<br>2. Bad safety cap. | 1. Check injector o-ring or replace.<br>2. Replace safety cap. |
| **Dump System** | Dump hose will not empty tank. | 1. Dump hose plug not removed.<br>2. Clog in bottom of tank. | 1. Remove plug.<br>2. Tip dump contents, remove debris. |
| | Dump hose leaks. | 1. Hose cut.<br>2. Clamp loose.<br>3. Dump plug bushing missing.<br>4. Plug missing. | 1. If leak is less than 4" from tank side, cut and reattach, or replace.<br>2. Tighten hose clamp.<br>3. Replace bushing.<br>4. Replace plug. |
| **Wheels and Casters** | Wheels won't roll, or they rub. | 1. Flat tires.<br>2. Debris wrapped around axle.<br>3. Bearings tight.<br>4. Wheels too loose on axle.<br>5. Bearings falling out. | 1. Inflate tires to 30 p.s.i.<br>2. Check for debris on axle.<br>3. Grease bearings.<br>4. Remove wheel, add washers to take up slack.<br>5. Replace bearing assembly. |
| **Squeegee Head** | Floor streaks. | 1. Worn blades or wheels. | 1. Replace wheels and / or blades. |
| | Squeegee head doesn't easily rotate when installed on wand. | 1. Brass ring on wand not in groove.<br>2. Coupling nut too tight. | 1. Loosen coupling nut and re-position head on groove.<br>2. Loosen 1/2 turn. |
| | Head won't stay on wand. | 1. Coupling nut cracked.<br>2. Brass ring worn. | 1. Replace.<br>2. Replace. |
| | Premature blade wear. | 1. Squeegee wheels worn. | 1. Check wheels for wear / replace. |
| | Sucks to the floor too tightly. | 1. Squeegee wheels worn. | 1. Check wheels for wear / replace. |

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