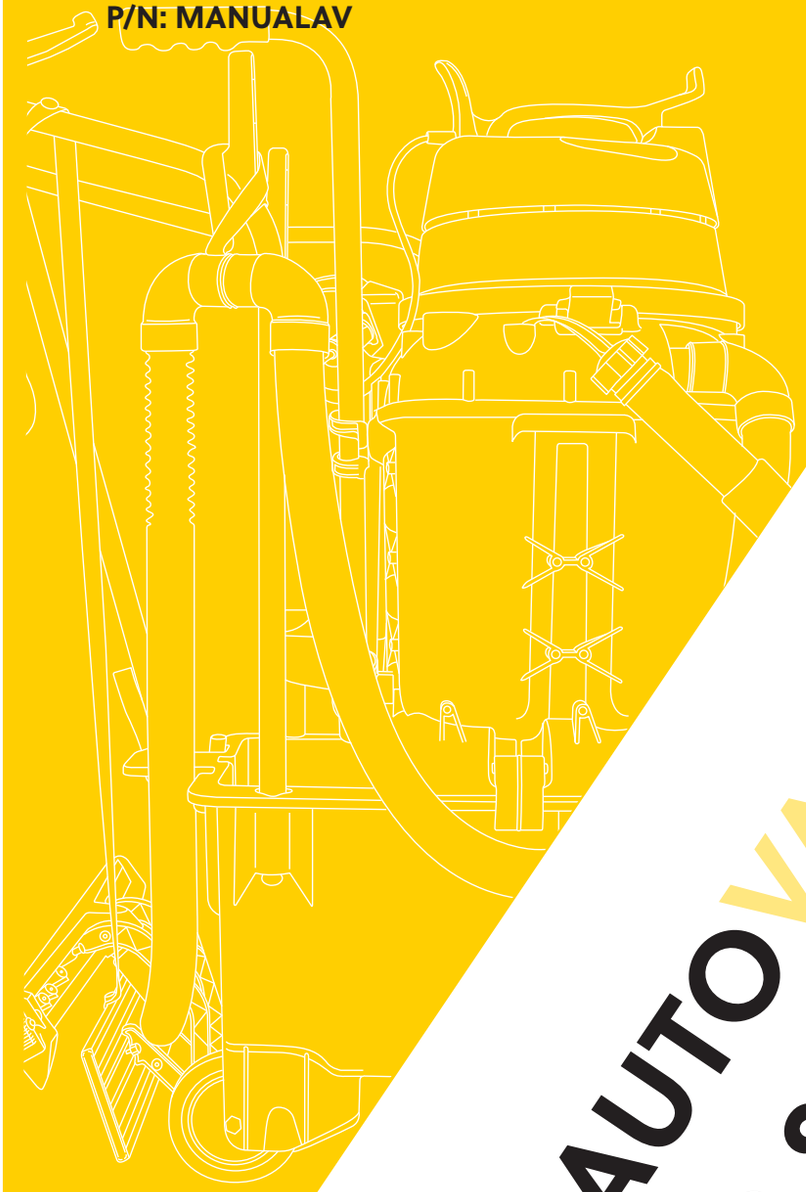
P/N: MANUALAV



# AUTOVAC™ OPERATOR & PARTS MANUAL

KAIVAC®

www.kaivac.com

# REVISION SHEET FOR MANUALAV

| Release No. | Date | Revision Description |
|---|---|---|
| 1 | 06/18/20 | Initial design/release of MANUALAV |
| 2 | 06/22/21 | Update to branding of MANUALAV |
| 3 | 07/15/21 | Battery Warning Update |
| 4 | 01/18/24 | Manual Update, Battery Information, Part Numbers, Images |
| 5 | 08/20/25 | Safety Information, Battery Information, Part Numbers |
| | | |
| | | |
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| | | |
| | | |

**Kaivac, Inc.**
2680 Van Hook Ave.
Hamilton, OH 45015
Customer/Technical Support
1-800-287-1136

**⚠ WARNING**

Do not attempt to operate the unit before reading and understanding this manual. Pay close attention to all WARNINGS, CAUTIONS and NOTICES. **Failure to do so may cause serious injury or death, and/or damage to property or your Kaivac product.**

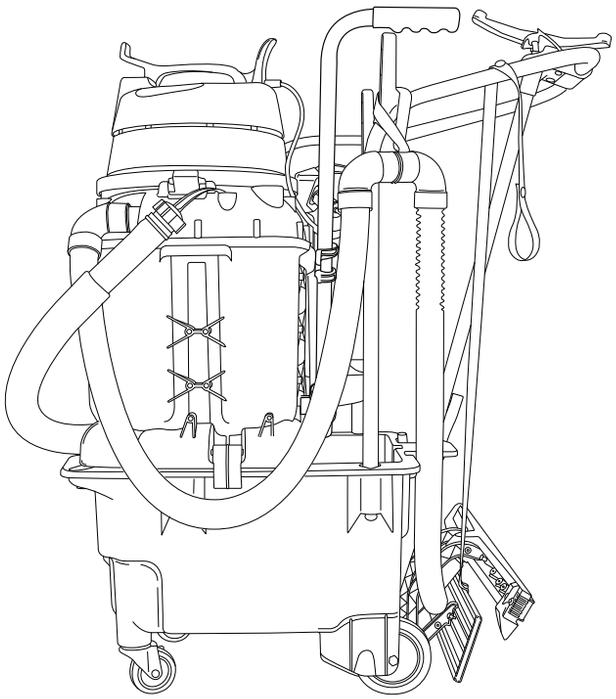
NOTE: Specifications and parts are subject to change without notice.

For most up to date safety information, visit kaivac.com

# Operator & Parts Manual - Table Of Contents

# 1.1 Product Identification

*This manual corresponds to the following units below*



**AUTOVAC**
**STRETCH**

# 1.2 Warranty Registration

Thank you for purchasing a Kaivac product. Please take a few moments to register your product at kaivac.com/warranty.

Why register?

- Ensure your warranty coverage
- Simplify warranty service in the future with your information on file
- Be the first to know about upgrades, issues, new options and special offers.

# 1.3 Limited Warranty Protection Plan

5 YEAR TROLLEY/TANK AND 1 YEAR PARTS AND LABOR (EXCLUDING BATTERY) Kaivac warrants to the original purchaser/user that the vacuum tank and bucket body are free from defects in workmanship and materials under normal use for a period of Five Years, and the battery interface and components (excluding Lithium-ion battery), vacuum motor, and spray system are free from defects in workmanship and materials under normal use for a period of One Year. This warranty does not include accessories or wear items. Items EXCLUDED from coverage: Squeegee blades and wheels, hoses, seals, gaskets, cords, casters, HEPA filter cartridges, chemical feed caps, spray gun, GFCI, vacuum wand assembly and other accessory tools.

- *Please Note:* using inappropriate chemicals constitutes misuse of these units. These units are not meant to be used with high-foaming or corrosive chemicals. Please check with your distributor or with Kaivac if you have questions about your chemical.

Battery Program Details

- Battery Warranty covers 2 years on a defective Battery.
- Battery Warranty covers the replacement of the Battery unit.
- Battery replacement remains under Warranty only for the remaining Warranty period of the original Battery unit (for a maximum of 2 years from the date of purchase of the unit).

WARRANTY LIMITATIONS:

- This warranty does not assume responsibility for damage or faulty performance caused by misuse or abuse, or where repairs or modifications have been made or attempted. Kaivac will make the final determination on whether the damage falls under this limited warranty for manufacturer's defects.
- The following actions constitute misuse or neglect of the battery that void the warranty of the battery:
  - Any modifications to the unit may nullify any warranty
  - Improper installation of the Quick Change battery
  - Exposure of the battery to temperatures above and below the battery limits
  - Use of any charger besides the supplied Kaivac® charger
  - Dropping the battery box
  - Long term storage of the battery without maintaining a battery charge of 25 to 40% capacity
  - Removal of the vacuum motor cord strain relief will void warranty. Do not remove the strain relief.

- **UNDER NO CIRCUMSTANCES WILL KAIVAC BE LIABLE FOR ANY LOSS, DAMAGE, EXPENSES OR CONSEQUENTIAL DAMAGES ARISING IN CONNECTION WITH THE USE OR INABILITY TO USE THE KAIVAC UNIT. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

# 1.4 Important Safety Instructions

**SAVE THESE INSTRUCTIONS**
**CONSULT KAIVAC.COM FOR THE MOST UP TO DATE SAFETY PRECAUTIONS**
**READ ALL INSTRUCTIONS BEFORE USING THIS UNIT**

| WARNING | CAUTION |
|---|---|
| SAFETY ALERT WARNING indicates a hazardous situation which, if not avoided, COULD result in serious injury or death | SAFETY ALERT CAUTION indicates a hazardous situation which, if not avoided, COULD result in minor to moderate injury. |

*NOTICE*

NOTICE provides key information by clarifying instructions.

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

**WARNING**

**RISK OF ELECTRIC SHOCK , FIRE, EXPLOSION, AND SERIOUS PERSONAL INJURY OR DEATH**

**GENERAL SAFETY INSTRUCTIONS (APPLICABLE TO CORDED AND BATTERY UNITS):**

- For commercial use only.
- Use unit only as described in this Manual. Use only Kaivac's recommended attachments.
- Follow the maintenance instructions specified in this Manual.
- For indoor use only.
- Store indoors.
- Stay alert - watch what you are doing.
- Keep operating area clear of all persons.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- NO COMBUSTIBLES! Sparks inside the motor can ignite flammable vapors or dust. Do not use unit near combustible liquids and gases, or to pick up explosive dusts or gasoline.
- Know how to stop the unit and bleed pressures quickly. Be thoroughly familiar with the unit's controls before operating.
- DO NOT allow unit to be used as a toy and unit should not be operated by children. Close attention is necessary when used near children.
- Use extra care when cleaning on stairs.
- DO NOT operate the unit when fatigued or under the influence of alcohol or drugs.
- DO NOT put any object into unit's openings. Do not use with any of the unit's opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- DO NOT pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- DO NOT overreach or stand on unstable support. Keep good footing and balance at all times.
- DO NOT operate without the Vacuum Motor Float Cage installed. If float is removed, reinstall by screwing back into place.
- DO NOT use without filters in place.
- **Personal Protective Equipment (PPE): It is recommended to wear proper personal protective equipment as required by the chemical product label instructions used in conjunction with the unit. For Kaivac chemical products, refer to product label.**

**SPRAY SYSTEM SAFETY INSTRUCTIONS:**

- DO NOT spray liquid from the unit or attachments onto electrical outlets or any electrical devices.
- Risk of injection or injury to persons - DO NOT direct discharge stream at persons.
- INJECTION HAZARD: Unit can cause serious injury if the spray permeates the skin. Do not point the spray gun at anyone or any part of the body. In case of permeation, seek medical aid immediately.
- THIS UNIT IS CAPABLE OF PRODUCING 500 PSI (3447 kPa). To avoid rupture and injury, do not operate this pump with components rated less than 500 PSI (3447 kPa) working pressure (including but not limited to spray guns, hose, and hose connections); and before servicing, cleaning or removal of any part, shut off power and relieve pressure.
- High pressure cleaners, such as this unit, shall not be used by children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or untrained personnel. Children should not play with the unit. Cleaning and user maintenance should not be performed by children.

**CORDED UNITS SAFETY INSTRUCTIONS (APPLICABLE TO CORDED UNITS):**

- Inspect cord and plug prior to use. Do not use with damaged cord or plug. If unit is not working as it should, has been dropped, damaged, left outdoors or dropped into water, do not use or charge and return unit to a Kaivac service center.
- Test the unit's ground fault circuit interrupter (GFCI) before each use.
- Turn off the unit before unplugging. Do not leave unit when plugged in. Unplug from outlet when not in use and before servicing.
- Turn off all controls before unplugging.
- Connect to a properly grounded outlet only. Do not remove ground pin on plug. See Grounding Instructions below.
- This unit may also have been 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.
- This unit comes with a grounded attachable extension cord. If cord is damaged, replace with equivalent 120v, 15amps, 14GA rated cord. This cord must be attached and mechanically secured using the provided cord connector to use the unit.
- The unit must be disconnected from any electrical or battery source when the unit is being cleaned or maintenance of unit or when replacing parts
- Keep all connections dry and off the ground.
- Keep the cord away from heated surfaces.
- If using extension cord with unit, make sure the connection is above and off the floor and away from exposure to liquid.
- DO NOT handle plug or unit with wet hands.
- DO NOT pull or carry by cord, use cord as handle, close a door on cord, or pull cord around sharp edges or corners. Do not run unit over cord. Keep cord away from heated surfaces.
- DO NOT unplug by pulling on cord. To unplug, grasp the plug, not the cord.

# 1.4 Important Safety Instructions (Continued)

**SAVE THESE INSTRUCTIONS**
**CONSULT KAIVAC.COM FOR THE MOST UP TO DATE SAFETY PRECAUTIONS**
**READ ALL INSTRUCTIONS BEFORE USING (THIS UNIT)**

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


**BATTERY UNITS SAFETY INSTRUCTIONS (APPLICABLE TO BATTERY UNITS):**

- **Never use a battery that has been damaged in any way.** Damaged batteries may exhibit unpredictable behavior.
- **Never use or charge a damaged battery pack.**
- ONLY USE with Kaivac, Inc. battery, and charger.
- Inspect the battery before each use for damage, dents, cracks, or holes.
- If included with legacy unit, the battery splash cover must remain in place. Without the battery splash cover, the battery housing may become damaged which may cause the battery to malfunction, which can result a fire, explosion, personal injury, and/or property damage.
- If your unit contains a chemical-resistant plastic protective helmet, consult the Helmet Addendum for additional instructions and warnings.
- Exposure of units to airborne polyunsaturated fats in the food service industry may cause deterioration of battery components. Failure to inspect and use as instructed may result in fire explosion, personal injury, or property damage.
- Under certain conditions, including damage or liquid infiltrating the battery's interior cells, the battery may emit smoke, sparks, or fire. Liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- Stop use immediately if the battery or unit sparks or shows signs of fire. And may result in fire.
- If unit or battery emits fumes, smoke, sparks, or fire, discontinue use immediately. Do not touch battery. If unit can be safely moved, move outside to a well ventilated fire safe area away from people or combustible material.
- DO NOT attempt to repair, service or modify the batteries or charger. Contact Kaivac Technical Support with any issues.
- Disconnect the battery from the unit before making any adjustments, changing accessories, or storing unit. Such preventive safety measures reduce the risk of starting the unit accidentally.
- When charging battery, make sure charger or unit has at least 6 inches of clearance on all sides for adequate air flow.
- When battery is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another. Connecting or shorting the battery terminals together may cause burns or a fire.
- Keep heat sources, sparks, and flames away from batteries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery, picking up or carrying the unit. Do not carry the unit with your finger on the switch. Energizing an unit that has the switch on invites accidents.
- DO NOT allow battery to be submerged in water.
- DO NOT use a battery that has been submerged in water, or if water has infiltrated the battery housing even if it appears to be working.
- DO NOT charge batteries outdoors.
- DO NOT short-circuit the battery or charger terminals with conductive items such as paper clips. This can deliver high current.
- DO NOT crush or drop the battery.
- DO NOT expose a battery or unit to fire or excessive temperature. Exposure to fire or temperature above 265ºF (130ºC) may cause explosion.
- DO NOT use or store the NTC System or battery in refrigerated areas, in environments when the battery is in direct contact with liquids, or near flammable or combustible materials.
- DO NOT charge or store battery for extended time (1 month or more) in temperatures below 40ºF (4ºC).
- DO NOT remove any part of the battery, charging unit, or unit: If your unit has a chemical-resistant plastic protective helmet, do not remove it.
- DO NOT plug battery in while Vacuum Motor is in ON position. It may damage the system.
- DO NOT incinerate the battery even if it is non-working or severely damaged. The battery can explode in a fire.
- DO NOT leave battery connected to charger once the charger light is green. Leaving battery on charger will diminish the life of the battery
- **Never dispose of the battery in the trash. It is important that your old, damaged battery is disposed of and/or returned as instructed by Kaivac Customer Care/Technical Support at 1-800-287-1136.**

# 1.4 Important Safety Instructions (Continued)

**SAVE THESE INSTRUCTIONS**
**CONSULT KAIVAC.COM FOR THE MOST UP TO DATE SAFETY PRECAUTIONS**
**READ ALL INSTRUCTIONS BEFORE USING (THIS UNIT)**

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


**CHARGER/ELECTRICAL WARNINGS:**

- Inspect the charger, cords, and connections prior to each use.
- Follow all charging instructions and do not charge the battery or unit outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
- Connect charging cord to a properly grounded outlet only. See Grounding Instructions.
- DO NOT use charger if it has a damaged cord or plug.
- DO NOT operate charger if it has received a sharp blow, been dropped, or damaged in any way.
- DO NOT handle charger, including charger plug and charger terminals, with wet hands while charger is plugged in or while inserting plug into electrical outlet.
- DO NOT leave charger plugged in when not in use.
- DO NOT plug in charger while Vacuum Head is in ON position. It may damage the unit's electrical system.
- DO NOT pull on charger cord to unplug. Grasp and pull the plug, not the cord.
- DO NOT carry charger by cord.

## QUICK RELEASE INSTRUCTIONS

These instructions only apply to legacy units containing the metal plug connector.

1. To disconnect the vacuum motor from the battery housing, push the button on the electrical connector and pull toward you to disengage the motor electrical cord from the battery housing.

2. Then to remove the battery from the unit, while standing at the rear of the unit, grab the battery by the handle and lift it up away from the unit.

3. To reconnect the battery housing to the vacuum motor, insert the motor electrical connector into the Battery Pack outlet, aligning the key features of the electrical connector into the outlet key-way. Press the connector into the outlet until it clicks to lock into place.

# 1.5 Battery Information

**Keep Batteries at Room Temperature:** Store between 32 and 113 degrees F (0ºC to 45ºC). Avoid battery exposure to extreme temperatures. If shelving battery longer than (1) month, deplete battery to 50% charge during storage period (two bars on the battery indicator).

**Batteries Lose Capacity Over Time:** Batteries naturally deteriorate over time whether being used or not. If battery use instructions are properly followed, batteries deteriorate at a rate of approximately 10% run time per year but may vary by patterns of use.

**Fully Discharge vs. Partial Discharge and the Effect on Battery Cycles:** Unlike lead acid batteries, the Lithium-ion battery used with Kaivac equipment is not damaged by full or partial discharging. The expected battery hours of use are approximately 600 hours and 400 charge cycles. If you discharge battery only to 80%, then the user can expect to get more cycles (500 cycles). With dual batteries make sure to alternate batteries per charge in order to maximize for life capacity.

**Extended Storage:** It is recommended to discharge to 50% capacity (two bars on the battery indicator) and store in a cool location (between 32ºF to 113ºF or 0ºC to 45ºC). To avoid battery impact, store battery laying down on its side on lowest shelf, and secured. If battery is dropped or experiences an impact or damage, discontinue use and replace. Never use a damaged battery, as a damaged battery may act in an unpredictable manner resulting in fire, explosion, property damage, or personal injury.

**Battery Gauge:** The Kaivac provided battery comes with a built-in Battery Gauge or which shows the approximate run time for the current charge remaining.

**Replacement - End of Life:** Rechargeable batteries eventually wear out. When your Kaivac Battery run time is less than 55% (i.e. 50 minutes for non-quick change and 33 minutes for Quick Change batteries), Kaivac recommends replacing your battery. Regardless of run time, contact Kaivac to replace your battery after 4 years. Consult kaivac.com for information on recycling your old battery through a licensed disposal facility.

**⚠WARNING**
RISK OF FIRE, EXPLOSION, PROPERTY DAMAGE, OR SERIOUS INJURY OR DEATH

DO NOT DISCARD BATTERY INTO TRASH! It is important to recycle your old batteries at your local authorized battery recycling facility or by calling 1-800-USA-CLEAN (1-800-872-2532) and selecting Option 3.

| **Battery Specifications** | |
|---|---|
| Weight | With Box, 11 lbs. (4,9 kg) |
| Body Material | Injection Mold Polypropylene |
| Dimensions (H x W x D) | 18 x 7 x 5 in. (45,7 x 17,8 x 12,7 cm) |
| Voltage | 36V DC |
| Battery Capacity | 15 A-hr |
| Battery Current | 15 A DC |
| Battery Type | Lithium-Ion |
| Approx. Run Time BOL (Beginning of Life) | 60 minutes |
| Approx. Run Time EOL (End of Life) | 35 minutes (discontinue use and take to recycling center) |
| Battery Box Receptacle | IP65 / IP67 (not required for UL) |
| Run Time Hour Meter | Acts as “odometer for battery” and runs only when motor switch is ON |
| Approx. Charge Cycles | 400 @ 100% discharge / 500 @ 80% discharge |
| Cut off Voltage (fully discharged) | 30V |
| **Charger Specifications** | |
| Approx. Charge Time | 5 hours |
| Charger Amps | 4 Amps |
| Charge Voltage | 42V DC |
| Charger Voltage | 110-240VAC / 36VDC (240VAC version only needs correct plug for wall outlet) |
| Charging Robustness | No special instructions |
| Battery Charge Memory | None |
| Battery Charge Gauge | Yes, LED Indicator |
| Approx. Charge Cycles | 400 @ 100% discharge / 500 @ 80% discharge |
| **Storage/Inventory:** | |
| Storage & Operation Ambient Temp | 32ºF (0ºC) to 113ºF(45ºC) |
| Storage & Shipping Charge | 40-60% Charge (35-38VDC) |

# 1.6 Grounding Information


## Grounding: Corded Units

**GROUND FAULT CIRCUIT INTERRUPTER PROTECTION (*for spray systems only)***

If your unit is a corded unit, it has been supplied with a ground-fault circuit-interrupter(GFCI) built into the plug of the power-supply cord. This GFCI device provides additional protection from the risk of electric shock. Should replacement of the plug or cord become necessary, use only identical replacement parts that include GFCI protection.

If your unit is a corded unit, it is for use on a nominal circuit and has a grounding attachment plug. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adapter should be used with this unit.

**GROUNDING INSTRUCTIONS**

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


Improper connection of the unit-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 unit by removing the ground pin on the plug – if the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

This unit comes with a grounded attachable extension cord. If damaged, replace with Kaivac® (OEM) cord, or if necessary an equivalent cord rated 120V, 15 amps, 3-wire, 14 GA. This cord must be attached and mechanically secured using the provided cord connector to use the unit.

## Grounding: Battery Units

**GROUNDING INSTRUCTIONS**

The charger 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 unit is equipped with a cord having 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.


Improper connection of the unit-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 unit by removing the ground pin on the plug – if the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

This unit is for use on a nominal circuit and has a grounding attachment plug. Make sure that the unit is connected to an outlet having the same configuration as the plug. No adapter should be used with this unit.

# 1.6 Grounding Information (Continued)

Make sure your extension cord is in good condition and is the correct size for your unit. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gage number, the heavier the cord. An undersized extension cord will cause a drop in line voltage resulting in loss of power and overheating.

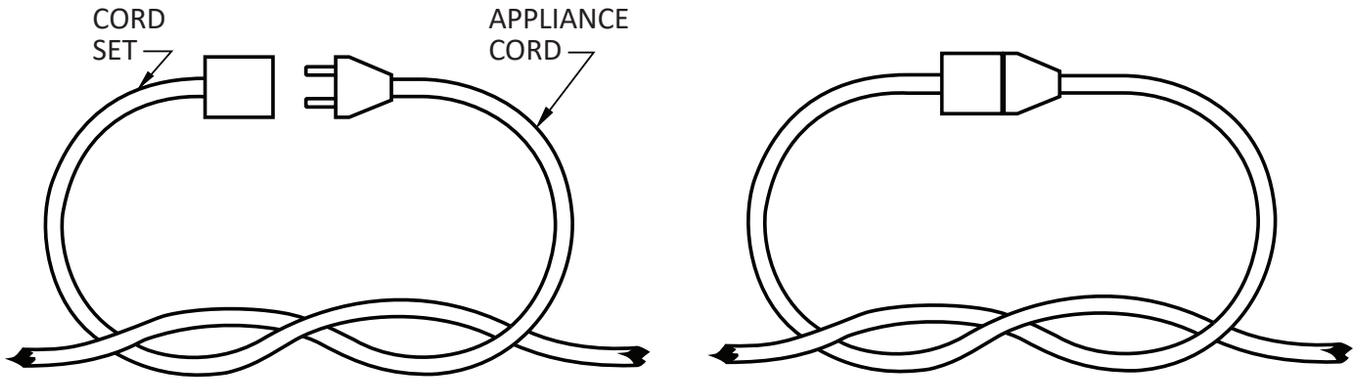
Use only three-wire outdoor extension cords that have three-prong grounding receptacles that accept the unit's plug.


To reduce the risk of personal injury due to a loose electrical connection between the unit's plug and extension cord, firmly and fully attach the unit plug to the extension cord. Periodically check the connection while operating the unit to ensure it is fully attached. Do not use an extension cord that provides a loose connection. A loose connection may result in overheating, fire, and increases the risk of a burning.

To reduce the risk of disconnection of the unit's cord from the extension cord during operations:

- Make a knot as shown in Figure 1 below:

**Figure 1** - Method of securing the appliance cord to the extension cord set




(A) TIE CORD AS SHOWN

(B) CONNECT PLUG AND RECEPTACLE

**Table 1** - Minimum gauge for extension cords

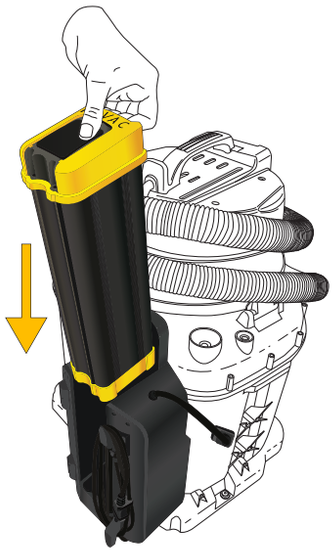
| Ampere rating | | Volts | Total length of cord | | | |
|---|---|---|---|---|---|---|
| | | | 7.62 m (25 ft) | 15.24 m (50 ft) | 30.48 m (100 ft) | 45.72 m (150 ft) |
| More than, A | Not more than, A | 120 V | $mm^2$ (AWG) | | | |
| 0 | 6 | — | 0.82 (18) | 1.3 (16) | 1.3 (16) | 2.1 (14) |
| 6 | 10 | — | 0.82 (18) | 1.3 (16) | 2.1 (14) | 3.3 (12) |
| 10 | 12 | — | 0.82 (18) | 1.3 (16) | 2.1 (14) | 3.3 (12) |

# 2.1 Battery Housing and Charging

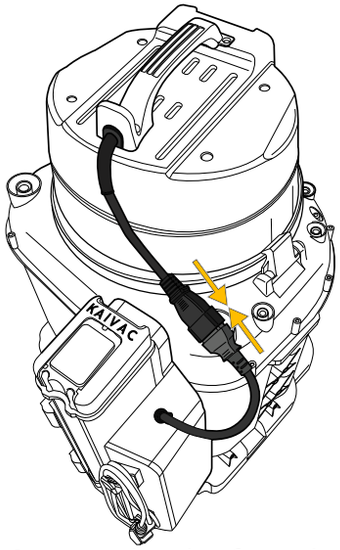
**WARNING**

RISK OF FIRE, EXPLOSION, PROPERTY DAMAGE, OR PERSONAL INJURY OR DEATH

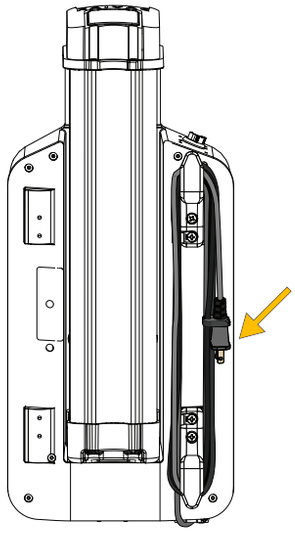
Inspect battery, housing, plug, cord, splash cover (if applicable), and helmet (if applicable) for damage, including cracks, separation, dents, holes, missing, pieces, and fraying cord or wires. Do not use a damaged unit or a unit with a damaged battery. Check all cords, hoses, and spray lines for damage prior to use. If damage is found, do not continue until proper repairs are completed.
If using a legacy unit equipped with a fabric splash cover, ensure the cover is flipped over the battery top. Newer battery models may also be equipped with a chemical-resistant plastic protective helmet and fabric splash cover, ensure cover is flipped over helmet top.
Do not remove helmet.



Lower battery down into the battery housing.

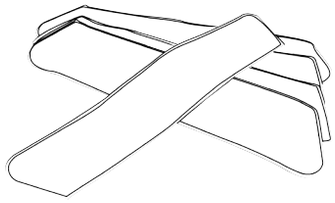



Connect the plug from the battery housing into the vacuum motor plug.

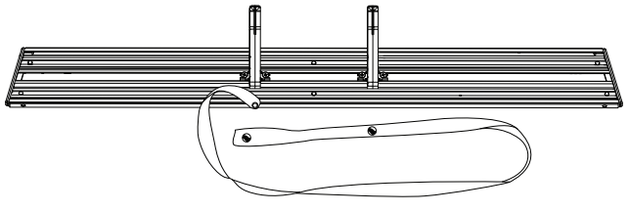


To charge the battery, keep the battery in the battery housing. Locate the cord wrapped around the cleats connected to the battery housing, plug into an outlet to begin charging.

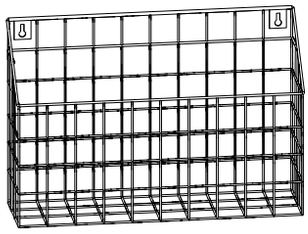
# 2.2 Unit Accessories



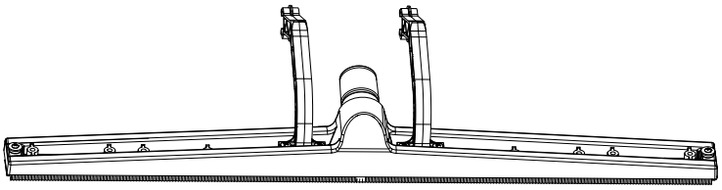
WET MOP PACK 26.5"
(UWMP-26)
WET MOP PACK 36"
(UWMP-90)



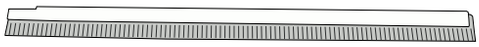
AUTOVAC SPREADER 24"
(AVSAL)



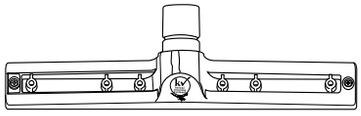
WIRE BASKET
(WBASK)



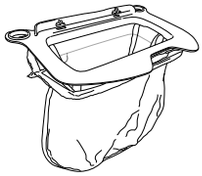
AUTOVAC 28"
(AVVAL2)



SQUEEGEE BLADE BLACK 14.5"
(CVA03BK)
SQUEEGEE BLADE CLEAR 10"
(GA0004)

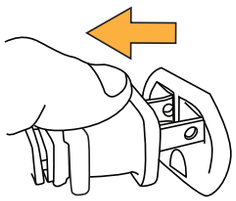
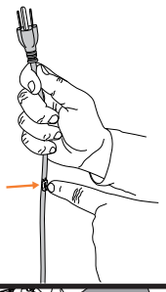
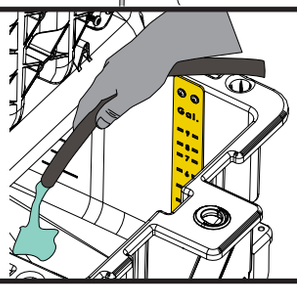
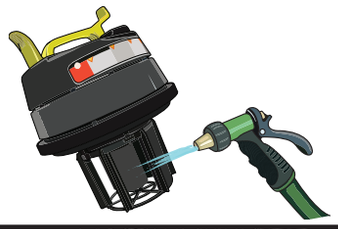
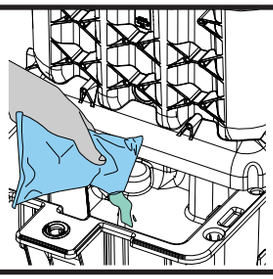


SQUEEGEE HEAD
(CVS12S10)

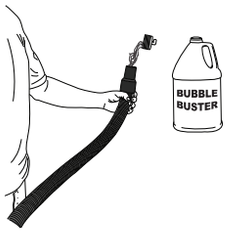
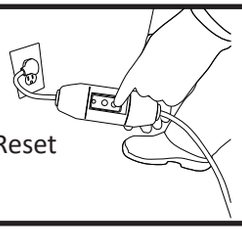
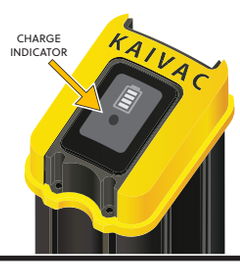
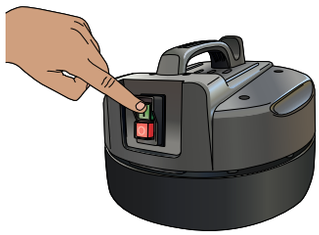


MESH FILTER BAG
(OBAGY)

# 2.3 Preparation For Use

| | | |
|---|---|---|
| 1. | Unplug the charger from the battery if applicable.<br>**WARNING**<br>RISK OF ELECTRIC SHOCK<br>Avoid getting water on the unit. |  |
| 2. | Inspect battery, housing, plug, cord, splash cover (if applicable), and helmet (if applicable) for damage, including cracks, separation, dents, holes, missing, pieces, and fraying cord or wires.<br>**WARNING**<br>RISK OF ELECTRIC SHOCK OR FIRE<br>Do not use a damaged unit or a unit with a damaged battery. Check all hoses and spray lines for damage prior to use. If damage is found, do not continue until proper repairs are completed. |  |
| 3. | For unit's with the trolley bucket, locate the Yellow Fill Marker of the trolley bucket to fill unit. Fill with clean, cool water. Use fill gauge located inside trolley bucket to measure how much is inside.<br>***NOTICE*** Do not fill over 10 gallons. |  |
| 4. | Clean and spray the Float Cage located inside the Vacuum Head. Ensure Float Cage is in place. Clean Float Cage regularly.<br>**CAUTION**<br>RISK OF INJURY<br>Do not use if Float Cage is not in place. |  |
| 5. | For units with a trolley bucket, if using chemical pouch, locate the trolley bucket and dump pouch. If using a chemical jug, ensure proper dilution of chemical is used. Refer to section 2.4 for more details.<br>***NOTICE***<br>Fill the tank with water and recommended amount of **Kaivac approved Chemicals**. |  |

# 2.3 Preparation For Use (Continued)

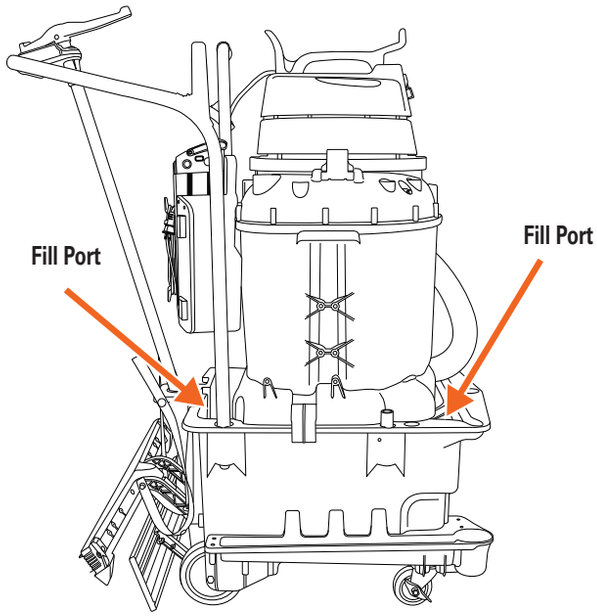
| | | |
|---|---|---|
| 6. | If using a cleaning product that foams, use a foam inhibitor to cut excess. Pour 2 capfuls of inhibitor in the Vac Hose with Vac running to coat inside of Hose.<br>**CAUTION**<br>Risk of motor damage<br>Foaming chemicals in tank may damage Vac Motor. |  |
| 7. | If corded, plug in unit and test GFCI (Ground Fault Circuit Interrupter) to ensure it is working properly. You are now ready. |  |
| 8. | If using a battery unit, ensure the battery is fully charged and in place. If unit is equipped with a splash cover, ensure it is in place over the battery. Power on unit using the vac head, you are now ready.<br>***NOTICE*** Some battery models may contain a chemical-resistant plastic protective helmet. Do not remove helmet. |  <br>  |

# 2.4 Filling The Unit

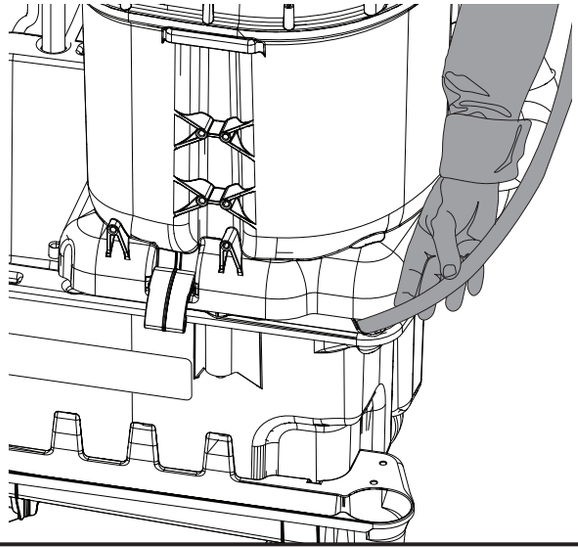
**WARNING**
RISK OF FIRE, EXPLOSION, PROPERTY DAMAGE, OR SERIOUS INJURY OR DEATH

If unit contains battery splash cover, before filling the unit, be sure the battery splash cover is in place and secure.

If unit has a Trolley Bucket, there are multiple Fill Ports available to fill the Trolley Bucket with a hose or other source. The Fill Port at the rear of the Trolley-Bucket is most convenient to access when using Chemical packets or Jugs.

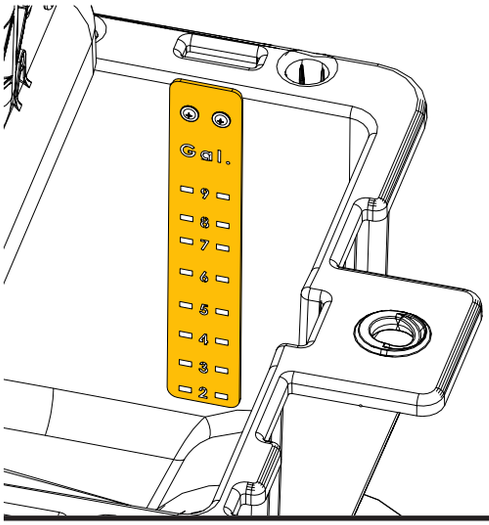



**Filling Trolley**



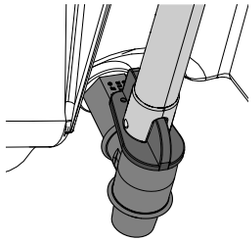
Note the location of the Fill Marker inside the Trolley Bucket.
Gallon markings are displayed for 5 to 8 gallons. For lesser quantity needs, the bottom of the label represents 2 gallons. For higher volume needs, the top of the label represents 10 gallons.

**NOTICE** Do not fill over 10 gallons.




**CAUTION**
If spigot is not closed, water will leak.

**Before filling with solution, ensure the spigot is in the "OFF" position as shown in the image displayed.**



**NOTICE**

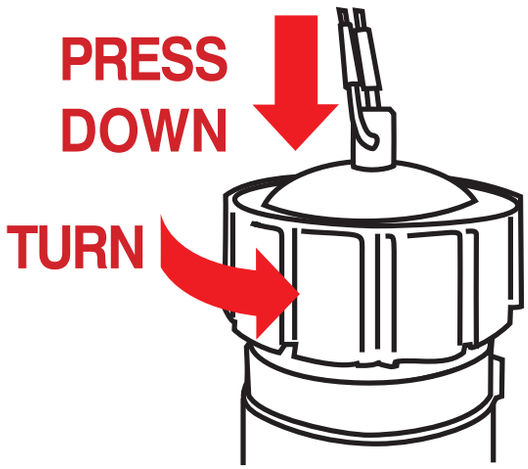
Fill the trolley with water and recommended amount of **Kaivac approved Chemicals**. Follow the proper dilution instructions on bottles or dispenser. For accuracy and convenience, use Kaivac proportioned chemical packets.
**Recommendation:** IF A CHEMICAL IS BEING USED, USE ONLY KAIVAC APPROVED CHEMICALS AT THE RECOMMENDED DILUTION.

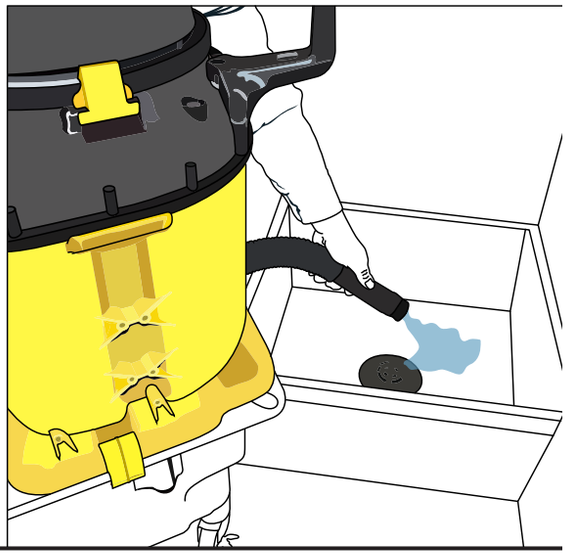
# 2.5 Emptying Vacuum Tank

If the Vacuum Motor shuts off before the job is complete, the Vacuum Tank may be full and need to be emptied. Lift the Vacuum Motor to check liquid level inside the Vacuum Tank. If unit is full or your job is complete, follow the instructions below to empty Tank into appropriate sink/drain.

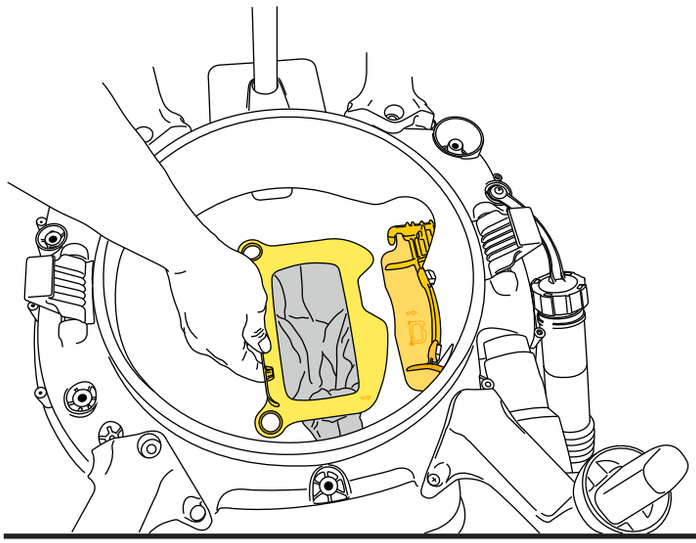
To begin the dumping process, you must first press down on the Cap and turn counter-clockwise
Once cap is removed, lower Dump Hose into appropriate sink/drain.

***NOTICE*** To prevent an accidental spill or overflow from the Dump Hose, be careful to keep hose end upright until it is over sink/drain.



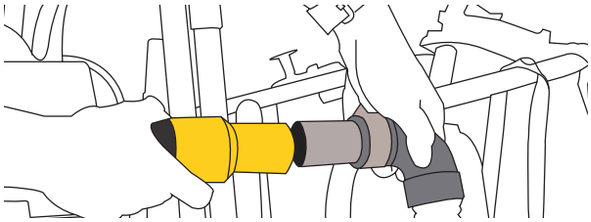
Before starting each new cleaning process, remove Filter Bag, dump any debris out, spray clean, and then replace back into the Filter Bag Frame.



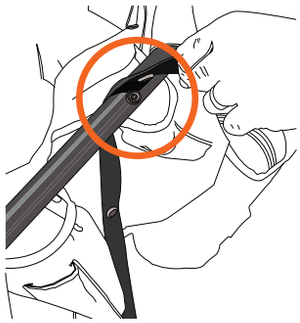
# 2.6 AutoVac Operation

The AutoVac feature is a walk-behind system for high speed cleaning of hard surface areas. It cleans as well and as fast as a walk-behind or ride-on auto scrubber at a fraction of the cost.

After the unit has been filled with the appropriate amount of water/solution, ensure that the orange AutoVac Connector on the side of the cart is connected in place.

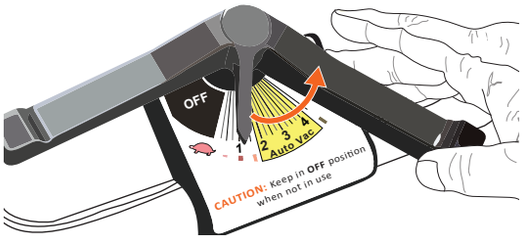


Lower the Microfiber Pad and Wide-area Squeegee Head by lifting the left Strap on the rear handle to unsnap it, and lower the pad and Squeegee Head.



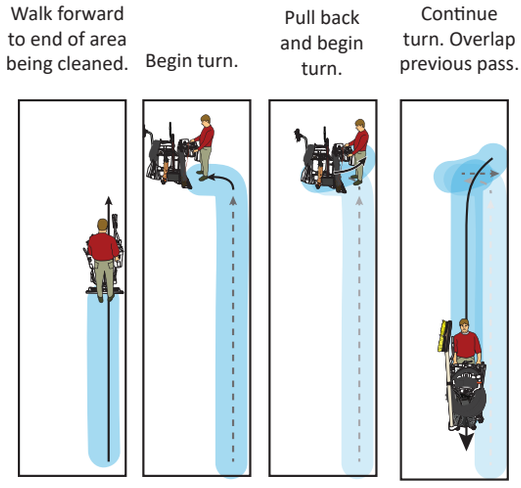
Reattach with next button snap to hold the Strap in place.

To begin cleaning floor area with AutoVac:



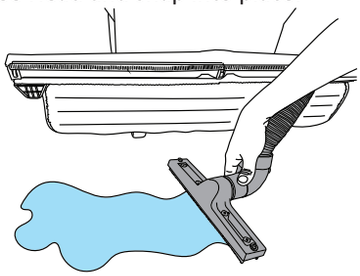

Use Thumb Throttle to dispense solution through the Spigot. Turn dial on Thumb Throttle to number that corresponds to your applicable floor type.

Walk back and forth across the area to be cleaned, using a three point turn approach when reaching turns, as detailed below.




***TIP: TO USE UP THE SOLUTION IN THE PAD, TURN THE THUMB THROTTLE TO OFF APPROXIMATELY 50' IN ADVANCE OF FINISHING THE FLOOR.***

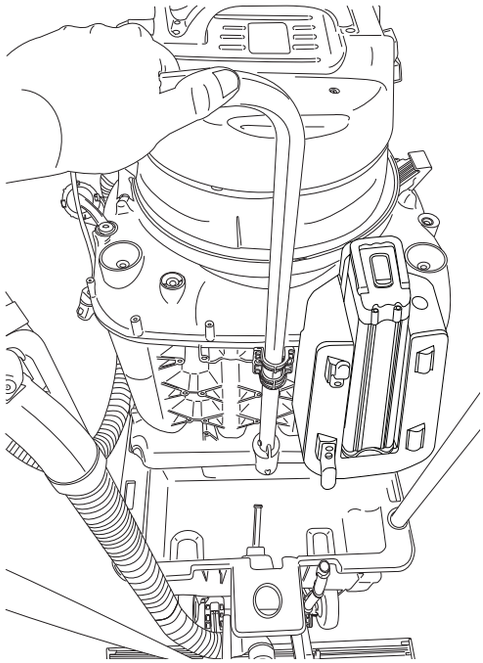
Once complete, lift the left Strap to raise the Spreader Pad and Squeegee Head and snap into place.

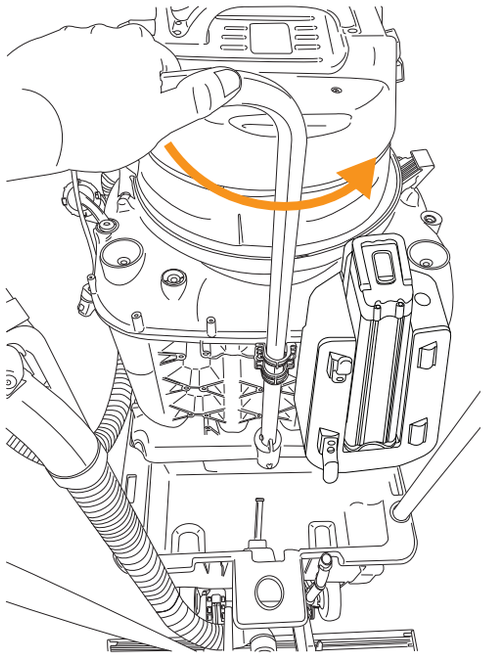


Use included Vacuum Tool to pick up any remaining liquids or drips on the floor.

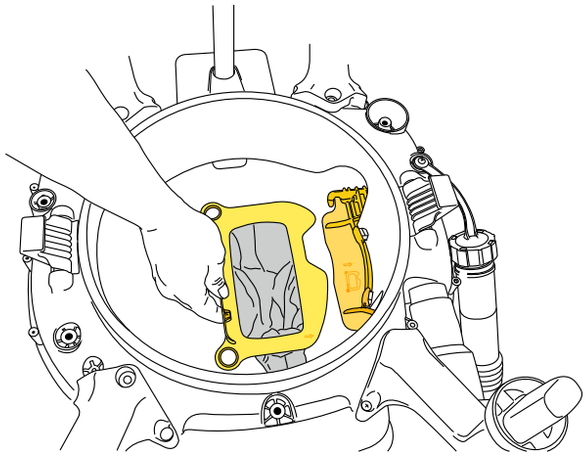
# 2.7 Solution Recycling

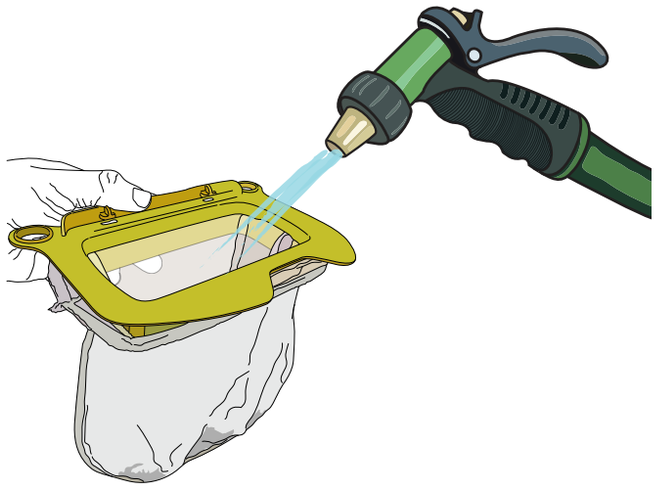
**To make use of the Stretch process:** After you have fully emptied the trolley bucket of solution, you can then reuse the recovered solution to extend (or STRETCH) the AutoVac process by turning the handle mounted on the Vacuum Tank to the right (as displayed below) and dispensing the recovered solution back into the Trolley Bucket.





Once all the solution from the Tank has been dumped into the Trolley Bucket, you may then continue your AutoVac process, just as before.





Before starting each recycle process, remove Filter Bag, dump any debris out, spray clean, and replace.

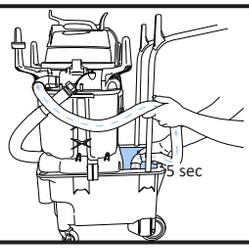
# 3.1 Unit & Battery Maintenance


Always unplug unit before servicing unit or inspecting.

| ITEM | PROCEDURE |
|---|---|
| Floor Squeegee | • Check condition of 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 needed.<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 into 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 blocked or dirty. 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>• Electrical cord must be inspected for tears or cuts in the insulation.<br>• Inspect plug and be sure ground pin is in place. |
| Vacuum Wand | • Use a wire or coarse brush with acid cleaner to remove residue from threads on the coupling and coupling nut. Apply grease when done. |
| HEPA Filter | • Replace every 3-6 months depending on use. |
| Float Cage | • Ensure cage is sprayed and cleaned daily to remove debris. |
| Battery Maintenance | • Inspect battery, plugs, cords, splash cover (if included), and chemical-resistant plastic protective helmet (if included) before charging and after charging.<br>• Charge and store battery indoors.<br>• If included, the battery splash cover must remain in place. Without the battery splash cover, the battery housing may become damaged which may cause the battery to malfunction, which can result a fire, explosion, personal injury, and/or property damage.<br>• Always keep helmet affixed to top of battery if your battery is so equipped.<br>• To view the battery, temporarily move the splash cover (if included). Replace the splash cover after inspection. Do not use unit if battery shows any damage, including cracks, dents, holes, fraying, or missing pieces.<br>• Once your battery run time is less than 55% (50 minutes for non-quick change and 30 minutes for quick change batteries), contact Kaivac to replace your battery. Regardless of run time, replace your battery after 4 years. Consult Kaivac.com for information on recycling your old battery.<br>• DO NOT attempt to repair, service or modify the batteries or charger. Contact Kaivac Technical Support with any issues.<br>• DO NOT use or store the NTC System or battery in refrigerated areas, in environments when the battery is in direct contact with liquids, or near flammable or combustible materials.<br>• DO NOT charge or store battery for extended time (1 month or more) in temperatures below 40ºF (4ºC).<br>• DO NOT use a battery or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.<br>• If unit is smoking or sparking, move outside to a fire-safe location immediately. If possible, disengage battery from unit, notify management, and call Kaivac Technical Support at 800-287-1136, Ext. 2 |
| Splash Cover (if included) | • Inspect splash cover for damage.<br>• Clean and dry the splash cover.<br>• Be sure the splash cover is secure. |

# 3.2 General & Daily Maintenance

When work is complete, vacuum excess cleaning solution from the bucket for 5 seconds to clean out and degrease the Vacuum Hose.



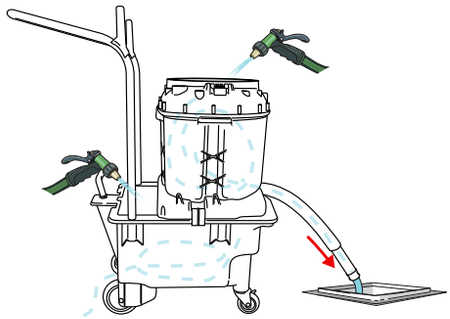

Alternatively, you can also turn Vacuum on and dispense solution into Vacuum Hose as shown to clean Hose and Tank.

Rinse Vacuum Tank and filter thoroughly at clean-up sink, preferably with hot water. Rinse out Trolley Bucket. Rinse plastic finger filter inside Trolley Bucket following to clear debris.

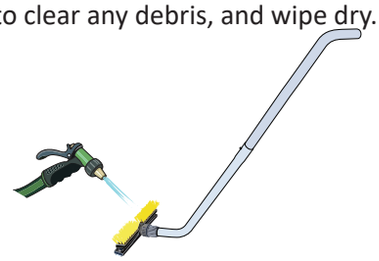

If unit is battery operated, avoid spraying the battery.

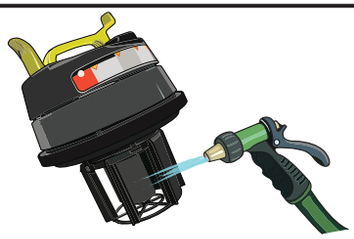
**Inside Trolley Bucket:**

**Inside Vacuum Tank:**



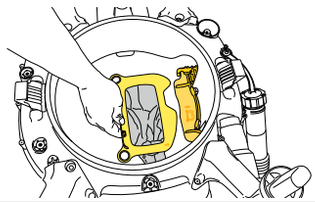
If applicable, rinse the Wand brushes to clear any debris, and wipe dry.





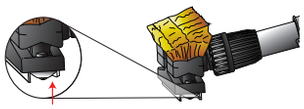
Remove debris from float ball and wire mesh Float Cage housing with hot water.

At end of shift or when full, remove Filter Bag, dump any debris out, spray clean, and replace.

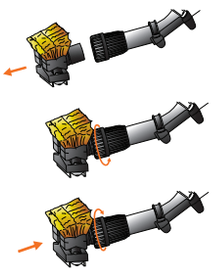


Check for worn squeegee blades. Worn blades cause streaking and loss of vacuum suction. Unscrew cuff at end of Vac Wand, remove old head or blades and replace with new every 6-8 weeks.

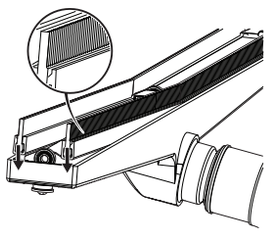
**IMPORTANT:** If cuff is removed, ensure Brass Ring stays in place.



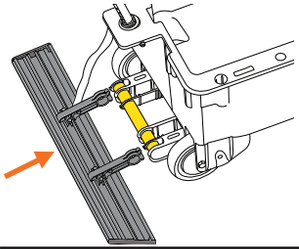
**REPLACE IF WORN**



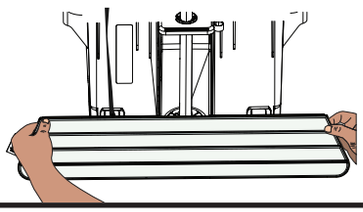
**BLADE RIBS FACING OUT.**



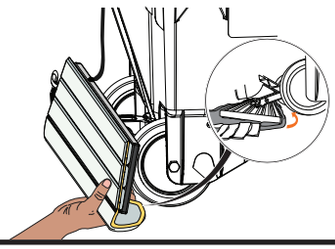
Attach pad holder.



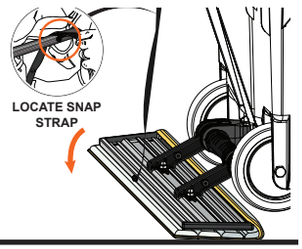
Align pad.



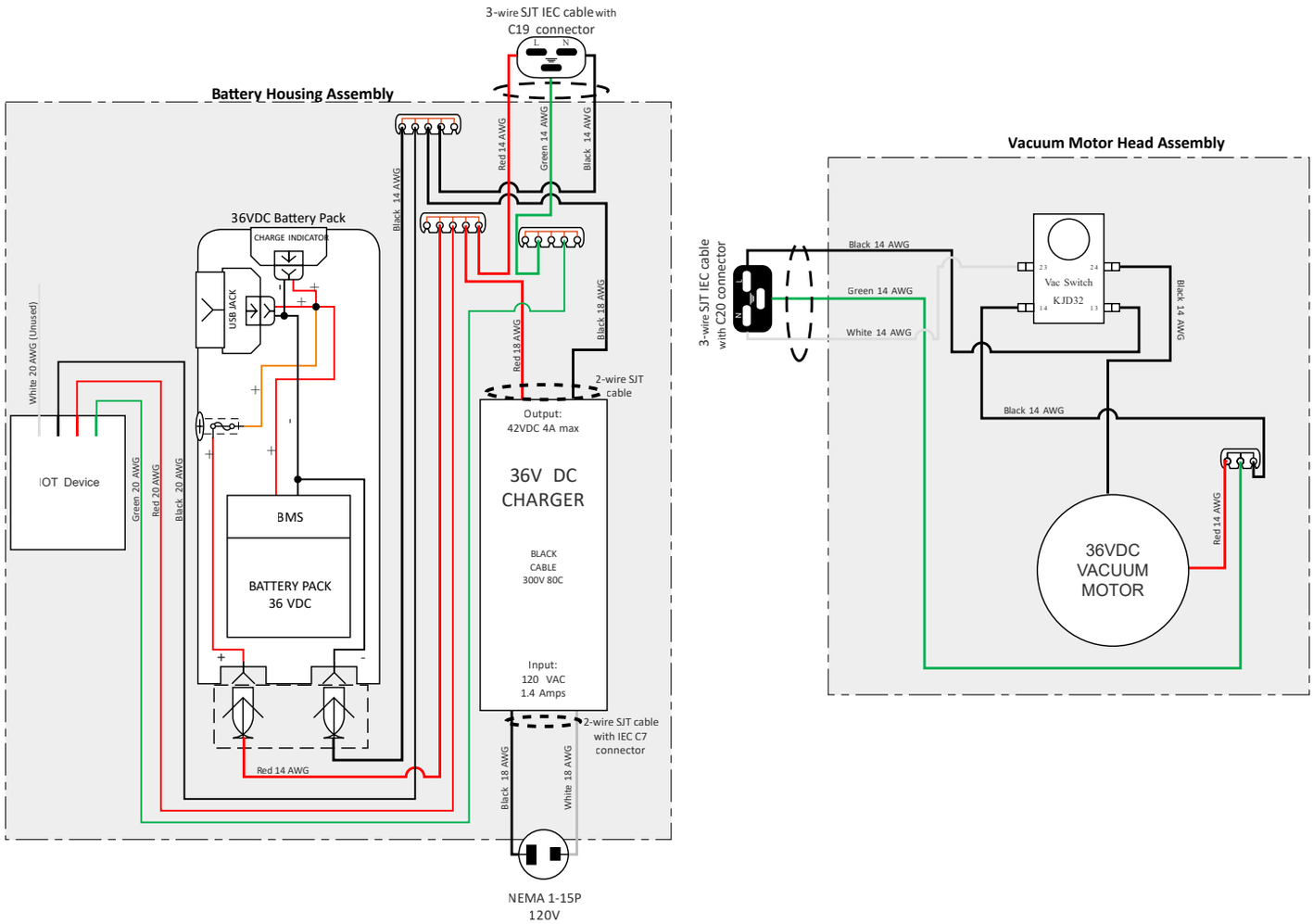
Fold under.



Lower pad holder.



# 3.3 Electrical Diagram



# 4.1 Troubleshooting Tips

- **Poor Vacuum Pickup**
  1. Check Squeegee Blades. If blades are worn or damaged, replace Squeegee Head.
  2. Clean float cage.
  3. Check for leaks in the Vacuum Hose or Gasket.
  4. Check for clogged Vacuum Hose.
  5. Check to see if float ball was tripped.

- **Vacuum Shuts Off Prematurely**
  1. Check Float Cage; clean if dirty.
  2. Cleaning Chemicals may be producing too much foam. Use Kaivac approved Chemicals.

- **Other Issues? Contact Technical Support**

**Phone:**

United States and Canada: 1-800-287-1136

International: 1-513-887-4600

**Email:**

info@kaivac.com

For Technical Support Contact Form go to: https://www.kaivac.com/contactus.php
and choose Technical Support tab.

# 4.2 TROUBLESHOOTING


Always unplug unit before inspecting or servicing.

| AREA | PROBLEM | POSSIBLE CAUSE | |
|---|---|---|---|
| Electrical | No Power to pump or vac motor | Unit not plugged in | Plug unit in |
| | | Switch not “on” | Check switches for “on” |
| | | GFCI tripped | Test and reset GFCI |
| | | Building circuit overloaded | Check and reset circuit |
| | | Switch wires loose | Disconnect power and check for loose wire |
| | | Connections loose | Disconnect power and check for loose wire under panel |
| | Electrical burning smell<br>WARNING<br>RISK OF FIRE, SERIOUS INJURY, OR DEATH<br>TURN UNIT OFF IMMEDIATELY. | Vac motor brushes worn | Remove vac motor and repair |
| | | Vac motor hung up | Release pressure on hose and jog vac switch, or replace |
| | | Pump motor hung up | Release pressure on hose and jog pump switch, or replace |
| Vacuum System | No/Weak vacuum | Vac tank full | Empty vac tank |
| | | Squeegee blades or wheels worn | Replace wheels or blades and check periodically |
| | | Float shutoff screen dirty | Spray off float screen to clean |
| | | Float ball stuck | Tap float and release/clean |
| | | Damaged hose | Cut and repair/replace |
| | | Dump hose plug missing | Contact dealer and replace |
| | | Access lid not right | Tighten lid hand tight |
| | | Vacuum hose plugged | Flush hose to remove debris |
| | | Too much liquid in vac hose | Allow air in when vacuuming |
| | | Vac hose still wrapped | Unwrap vac hose fully |
| | | Exhaust plugged | Clean exhaust port and HEPA filter |
| | | Leak in vac tank | If repairable, clean and dry affected area and seal with silicone |
| | | HEPA filter clogged | Remove HEPA filter and clean |
| | Moisture from exhaust | Vac tank full | Dump vac tank |
| | | Float shutoff missing | Replace |
| | | Excessive foam in vac tank | Use defoamer |
| Blow Dry System | No air flow | Hose disconnected | Reconnect hose |
| | Moisture from exhaust | Water in blow hose | Dry blow line |
| | Suction, not blow action | Vacuum hose connected to vac tank | Reconnect to vac motor exhaust hose |

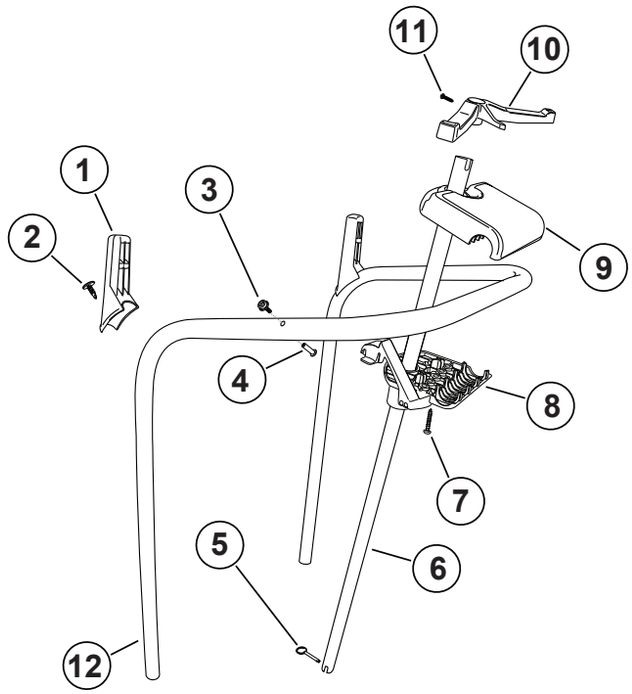
# 4.2 Troubleshooting (Continued)

| AREA | PROBLEM | POSSIBLE CAUSE | SOLUTION |
|---|---|---|---|
| High Pressure System<br>**WARNING**<br>Always unplug unit before inspecting or servicing. RISK OF ELECTRICAL SHOCK, FIRE, SERIOUS INJURY, OR DEATH | No water from pump or low pressure | Out of water | Fill water tank |
| | | Gun nozzle plugged | Remove orifice with Allen wrench and clean |
| | | Air in pump (vapor lock) | Use power prime technique |
| | | Gun orifice missing | Replace orifice |
| | | Water tank filter plugged | Clean tank and filter |
| | | In-line bowl filter plugged | Remove filter cover and clean |
| | | Bowl filter lid loose | Gently tighten bowl cover |
| | | Pressure hose damaged | Repair or replace |
| | | Quick disconnect leaking | Tighten or replace |
| | | Injector plugged | Remove safety cap from chemical and blow small amounts of compressed air into line |
| | | Pulse hose damaged | Repair or replace |
| | | Regulator failed | Replace |
| | | Hose kinked | Unkink and check for damage |
| | | Seals in pump need replaced | Remove and replace seals |
| | Bad fan pattern or pinpoint pattern on gun | Debris in nozzle | Remove orifice with Allen wrench and clean |
| | | Orifice damaged | Remove and replace |
| Chemical Injection System<br>**WARNING**<br>Always unplug unit before inspecting or servicing. RISK OF ELECTRICAL SHOCK, FIRE, SERIOUS INJURY, OR DEATH | No chemical flow | Out of chemical | Refill chemical |
| | | Safety cap not secure | Check safety cap/tighten |
| | | Chemical valve “off” | Check on/off valve |
| | | Safety cap plugged | Replace cap |
| | | Spray gun in wrong mode | Make sure gun nozzle is pulled out away from gun chemical mode |
| | | Metering tip plugged | Check metering tip for clog |
| | | Injector plugged | Remove safety cap from chemical and blow small amounts of compressed air into line |
| | | Air entering system | Check for air entering system around chemical lines or injector |
| | | Injector installed backwards | If fluttering or pulsing sound can be heard while spraying or when unit is running, it is possible that your injector is in backwards. Remove; reinstall. |
| | | Kink in chemical line | Replace chemical line |

# 4.2 Troubleshooting (Continued)

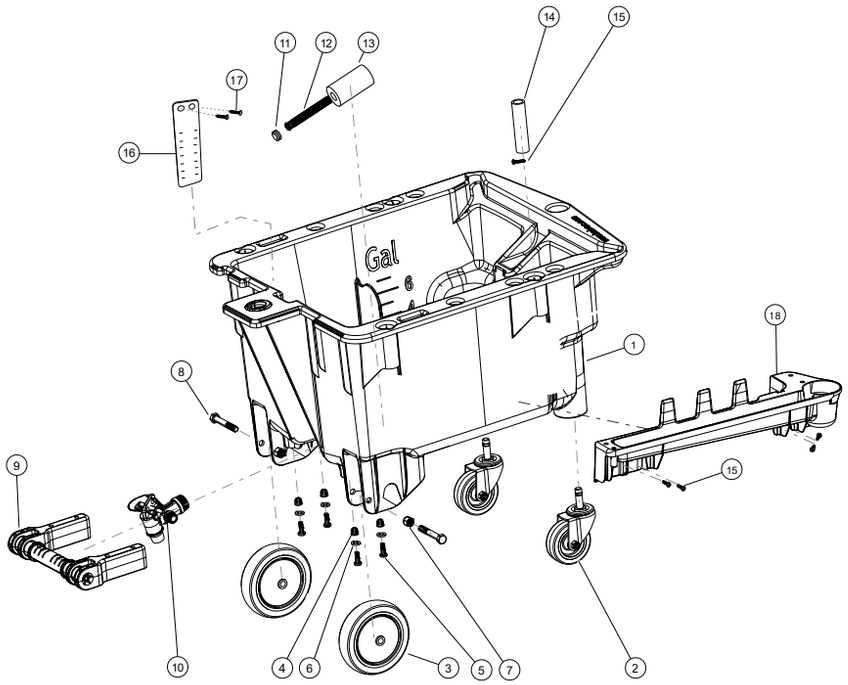
| AREA | PROBLEM | POSSIBLE CAUSE | SOLUTION |
|---|---|---|---|
| Chemical Injection System continued | Not enough chemical | Metering tip plugged | Remove and clean |
| | | Wrong metering tip | Check and replace per chart |
| | Chemical line blows off safety cap | Debris in injector | Remove safety cap from chemical and blow small amounts of compressed air into line |
| | Water back flows into chemical bottle | Bad seat on injector check valve | Check injector o-ring or replace |
| | | Bad safety cap | Replace safety cap |
| Dump System | Dump hose will not empty tank | Dump hose cap not removed | Remove cap |
| | | Clog in bottom of tank | Tip dump contents, remove debris |
| | Dump hose leaks | Hose cut | If leak is less than 4” from tank side, cut and reattach, or replace |
| | | Clamp loose | Tighten hose clamp |
| | | Dump cap missing | Replace cap |
| Wheels and Casters | Wheels will not roll; rubbing | Flat tires | Inflate tires to 30 p.s.i. |
| | | Debris wrapped around axle | Check for debris on axle |
| | | Bearings tight | Grease bearings |
| | | Wheels too loose on axle | Remove wheel, add washers to take up slack |
| | | Bearings falling out | Replace bearing assembly |
| Squeegee Head | Floor streaks | Worn blades or wheels | Replace wheels and/or blades |
| | Squeegee head does not easily rotate when installed on wand | Brass ring on wand not in groove | Loosen coupling nut and re-position head on groove |
| | | Coupling nut too tight | Loosen 1/2 turn |
| | Head will not stay on wand | Coupling nut cracked | Replace |
| | | Brass ring worn | Replace |
| | Premature blade wear | Squeegee wheels worn | Check wheels for wear/ replace |
| | Sucks to the floor too tightly | Squeegee wheels worn | Check wheels for wear/ replace |
| Battery<br>**WARNING**<br>RISK OF FIRE, EXPLOSION, AND SERIOUS INJURY, OR DEATH | Sparks/Burning/Fire/Smoke<br><br>STOP USE IMMEDIATELY | Damage to battery or charger | Stop use immediately. Disconnect battery from charger, if possible. Unplug charger, if possible. |

# 5.1 Handle Assembly Parts Diagram




| # | PART NO. | PART DESCRIPTION |
|---|---|---|
| 1 | STOB | PLASTIC HANDLE POST |
| 2 | CSS208 | HANDLE POST HARDWARE |
| 3 | CSS147 | MALE SNAP 18-8 SS 8-32 X 1/2 |
| 4 | CSS335 | 8-32 FEMALE BINDING POST |
| 5 | CSS338 | 1/4 IN X 1-1/2 IN DETENT RING PIN |
| 6 | EXTROD | OMNIFLEX THUMB THROTTLE EXTENSION ROD |
| 7 | CSS329 | 1/4 X 10 X 1 PLASTITE ZINC PAN TORX 30 |
| 8 | OTTPLATL | OMNIFLEX THUMB THROTTLE LOWER PLATFORM |
| 9 | OTTPLAT | OMNIFLEX THUMB THROTTLE PLATFORM |
| 10 | OTT | OMNIFLEX THUMB THROTTLE |
| 11 | CSS332 | 8 SST SCREW 7/8 |
| 12 | OFUH | HANDLE RAW |

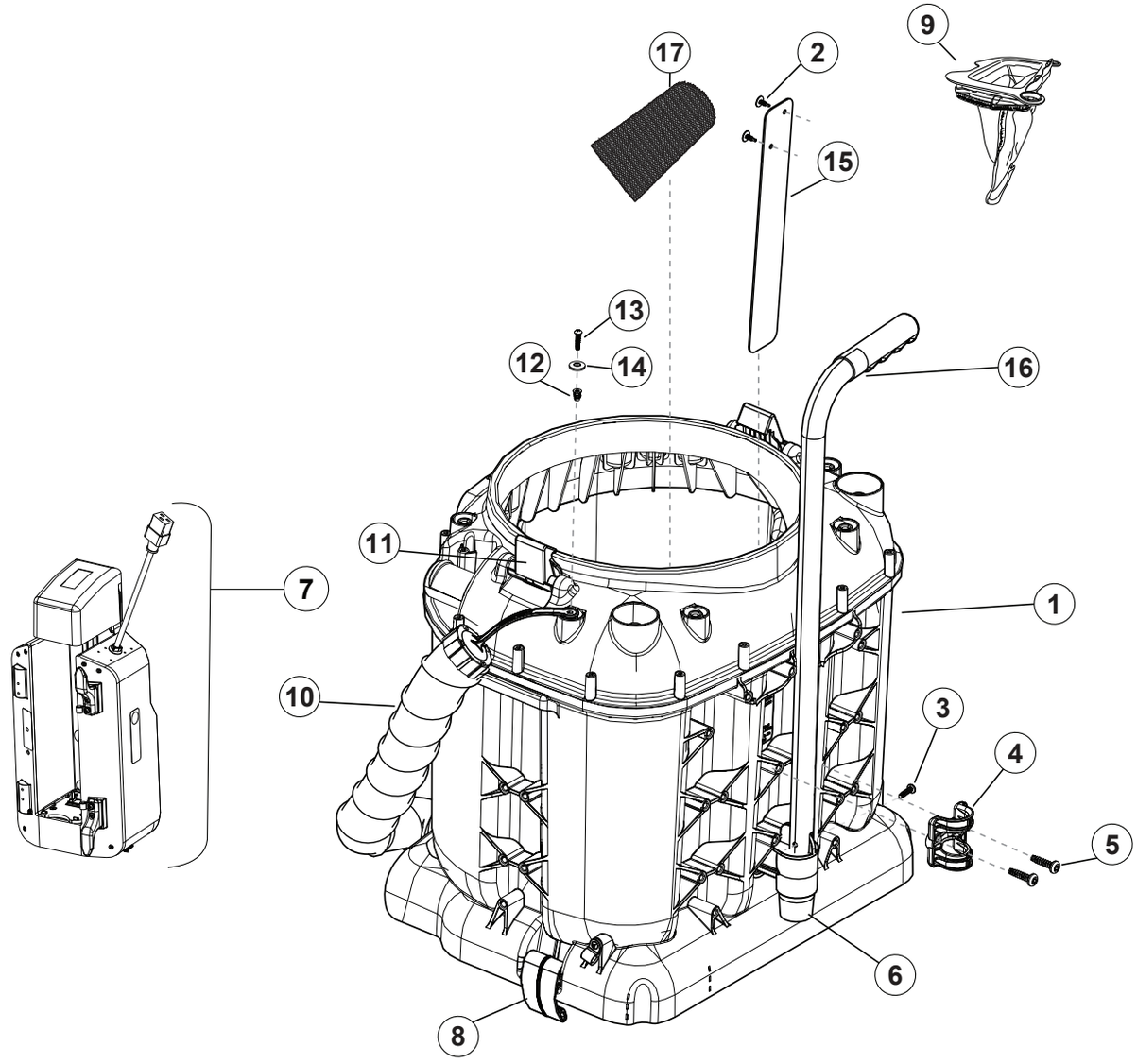
# 5.2 Trolley-Bucket Assembly Parts Diagram




**[P/N: KMF04]**

| # | PART NO. | PART DESCRIPTION |
|---|---|---|
| 1 | KMFBLK | OMNIFLEX TROLLEY BLACK |
| 2 | OFCSTR | OMNIFLEX 3 IN CASTER NO BRAKE |
| 3 | WH5KMF2 | 5 IN DIA REAR WHEEL |
| 4 | KF017 | INSERT - FLANGED - 1/4-20 X .394IN |
| 5 | CSS187 | SCREW - MACHINE - PHILLIPS - PAN - ZINC - 1/4-20 X 3/4IN |
| 6 | CSS133 | WASHER - SPLIT LOCK - 18-8 SST - 5/16 - .310ID X .565OD |
| 7 | CSS311 | NUT - HEX - LOCKING - ZINC - 3/8-16 |
| 8 | CSS302 | BOLT - MACHINE - HEX - 18-8 SST - 3/8-16 X 2 1/2IN |
| 9 | AVHA | AUTOVAC - GEN 2 TROLLEY HITCH |
| 10 | KMB20SR2 | OMNIFLEX SPIGOT PLASTIC |
| 11 | CPS39V | VITON O-RING |
| 12 | CPS07 | PLASTIC FINGER FILTER |
| 13 | GP0019 | FILTER - MIXER - RAW - SLEEVE |
| 14 | OTP | TROLLEY - VAC TANK INTERFACE POST |
| 15 | CSS17A | SCREW - TAPPING - PHILLIPS - PAN - 18-8 SST - NO. 8 X 3/4IN |
| 16 | GP0007 | FILL GAUGE MARKER FOR TROLLEY |
| 17 | CSS208 | 8 X 1/2 SS TRUSS SCREW |
| 18 | KF013A | STORAGE - DRIP TRAY - TROLLEY |

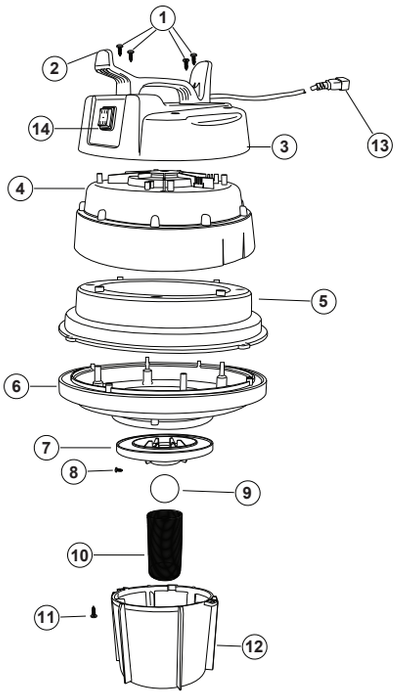
# 5.3 Vacuum Tank Assembly Parts Diagram




**[P/N: VTOF17, VTOF32]**

| # | PART NO. | PART DESCRIPTION |
|---|---|---|
| 1 | OVTBBLK | OMNIFLEX VAC TANK BOTTOM BLACK |
| 2 | CSS208 | SCREW - DRILLING - PHILLIPS - TRUSS - ZINC - NO. 8 X 1/2IN |
| 3 | CSS214 | SCREW - FORMING - PHILLIPS - PAN - ZINC - NO. 10 X 3/4IN |
| 4 | OVTSHB | BRACKET - VAC TANK - SPIGOT HANDLE OMNIFLEX |
| 5 | CSS364 | SCREW - FORMING - TORX - PAN - ZINC - 1/4 X 1IN |
| 6 | KMB22A | SPIGOT - ASSEMBLY - 1IN GEN 1 |
| 7A | EABT09 | QC INTERFACE WITH INTEGRATED CHARGER & IOT |
| 7B | EABT16 | QC INTERFACE WITH INTEGRATED CHARGER & IOT - INTL |
| 8 | CLASP2Y | OMNIFLEX - VAC TANK - CLASP LOWER YELLOW |
| 9 | OBAGY | MESH FILTER BAG |
| 10A | HVDH00 | DUMP HOSE - 26IN W/ 2IN CUFF FOOD SERVICE - OMNIFLEX ONLY |
| 10B | DH25 | DUMP HOSE - 26IN W/ 2IN CUFF - USE WHEN HVDH00 IS INACTIVE |
| 11 | CLASP1Y | OMNIFLEX CLASP UPPER YELLOW |
| 12 | CSS211 | INSERT - FLANGED - 8-32 X .361IN |
| 13 | CSS209 | SCREW - MACHINE - PHILLIPS - PAN - 18-8 SST - 8-32 X 3/4IN |
| 14 | CSS306 | WASHER - FLAT - NEOPRENE GALVANIZED - 1/4 |
| 15 | FGM11 | SIGHT - GAUGE - 11IN |
| 16 | COHA00 | ASSEMBLY - SPIGOT - OMNIFLEX METAL |
| 17 | RFILTA | FILTER - RECYCLE - ASSEMBLY |

# 5.4 Vacuum Head Assembly Parts Diagram




**[P/N: VM3D04]**

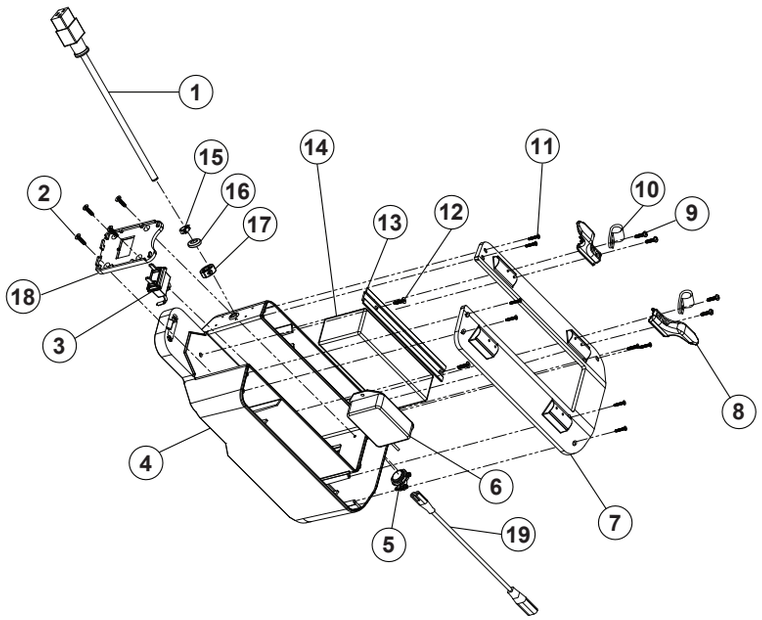
| # | PART NO. | PART DESCRIPTION |
|---|---|---|
| 1 | CSS17A | 8 SST SCREW 3/4 IN |
| 2 | OVMHANY | OMNIFLEX VAC MOTOR HANDLE YELLOW |
| 3 | ZD10TC | OMNI VAC MOTOR TOP COVER |
| 4 | ZD10MC | OMNI VAC MOTOR MIDDLE COVER |
| 5 | ZD10MR36 | OMNI VAC MOTOR MIDDLE RING 36V |
| 6 | ZD10BC | OMNI VAC MOTOR BOTTOM COVER |
| 7 | FCINT | FLOAT CAGE PLASTIC INTERFACE |
| 8 | CSS318 | 5/6" SS PHILLIPS FOR ZD 10/FCINT |
| 9 | CVS26 | OMNIFLEX FLOAT BALL |
| 10 | ZD10 | STAINLESS STEEL FLOAT CAGE |
| 11 | CSS313 | SCREW #7 PANHEAD PHIL SS 1/2 IN |
| 12 | ZD10B | OMNI VAC MOTOR BASKET |
| 13 | HEPC02 | POWER CORD 34 IN - C20 MALE |
| 14 | HESB01 | SWITCH - ELECTROMAGNETIC - 25.1A HEAVY DUTY |

# 5.5 Battery Interface Assembly Parts Diagram

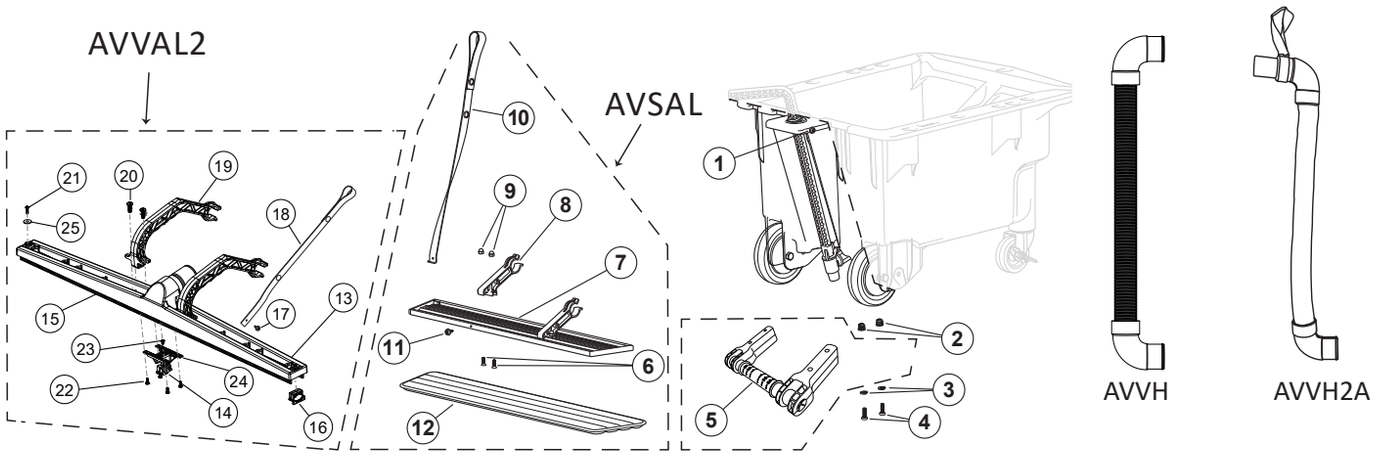
**[P/N: EABT09, EABT16]**

| # | PART NO. | PART DESCRIPTION |
|---|---|---|
| 1 | HEPC01 | C19 CABLE |
| 2 | CSS359 | 10 X 3/4 FLAT HEAD FORMING SCREW |
| 3 | BINTPLUG | BATTERY BASE PLUG |
| 4 | GP0008 | BATTERY CHARGER HOUSING |
| 5 | CES12 | 3/8 CONDUIT CLAMP |
| 6 | HETR01 | IOT UNIT |
| 7 | GP0009 | BATTERY CHARGER HOUSING LID |
| 8 | GP0010 | CORD WRAP/CLEAT |
| 9 | CSS322 | 10 X 3/4 PHL PAN HI-LO |
| 10 | HWM010 | CABLE CLAMP 3/16 BLACK |
| 11 | HWS000 | 6 X 3/4 THREAD FORMING SCREW TORX |
| 12 | CSS359 | 10 X 3/4 FLAT HEAD FORMING SCREW |
| 13 | HEBT00 | GUIDE RAIL FOR BATTERY |
| 14 | EACG00 | 36V BATTERY CHARGER |
| 15 | HWM004 | 3/8 ID SHAFT COLLAR |
| 16 | HWM005 | 3/8 ID X 1/2 RUBBER GROMMET |
| 17 | HWM006 | SNAP GRIP HOSE CLAMP .30 MIN .36 MAX |
| 18 | BINTBASE | PLUG BASE |
| 19* | HEPC07 | CHARGER EXTENSION |

* International units only



# 5.6 AutoVac Assembly Parts Diagram




| # | PART NO. | PART DESCRIPTION |
|---|---|---|
| | AVVH2A | AUTOVAC VAC HOSE 7.5 FT ASSY |
| | AVVH | VAC HOSE 15 FT |
| 1 | CSS20 | SNAP STUD |
| 2 | KF017 | 1/4 IN INSERTS FOR HITCH |
| 3 | CSS133 | 5/16 SPLIT WASHER FOR HITCH |
| 4 | CSS187 | 1/4-20 PAN HEAD SCREW FOR HITCH |
| 5 | AVHA | AUTOVAC HITCH ASSEMBLY |
| | AVSAL | AUTOVAC SPREADER ASSEMBLY LONG STRAP |
| 6 | CSS190 | ARM MOUNTING SCREWS |
| 7 | AVMFH | MICROFIBER PAD HOLDER |
| 8 | AVMFARM | SPREADER PLASTIC ARM BLACK |
| 9 | CSS102 | ACORN NUT FOR ARM |
| 10 | SUBSSSALB | AUTOVAC ASSEMBLY SNAP & STRAP LONG |
| 11 | CSS20 | SNAP STUD |
| 12 | UWMP-26 | AUTOVAC MICROFIBER PAD |
| | AVVAL2 | AUTOVAC VACUUM ASSEMBLY |
| 13 | CVS12-28 | 28” SQUEEGEE HEAD ASSEMBLY |
| 14 | STEEL | S/S WHEEL ASY FOR SQUEEGEE HEAD |
| 15 | CVA03BK | AUTOVAC SQUEEGEE BLADE |
| 16 | STEELC | AUTOVAC WHEEL REPLACEMENT |
| 17 | CSS20 | SNAP STUD |
| 18 | SUBSSVAL | VAC ASSEMBLY SNAP STRAP |
| 19 | AVVARM | VACUUM PLASTIC ARM |
| 20 | CSS191 | #12-24 X 5/8 SCREW FOR ARM |
| 21 | CAA09B | PHILLIPS - PAN - 410 SST - NO. 8 X 1/2IN |
| 22 | CAA09 | PHILLIPS - PAN - 18-8 SST - NO. 8 X 5/16IN |
| 23 | CSS318 | PHILLIPS - PAN - 18-8 SST - NO. 6 X 5/16IN |
| 24 | KACWH | SQUEEGEE HEAD - 28IN CENTER WHEEL HOUSING |
| 25 | CSS373 | FLAT - 18-8 SST - NO. 6 - .156ID X .562OD |