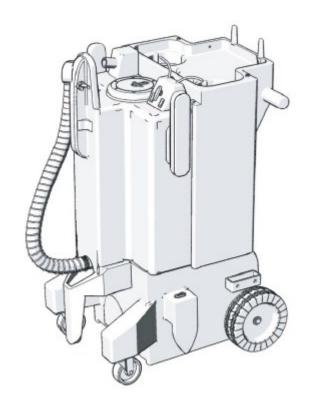


# Operator & Parts Manual

## KaiVac® 2100 Series

2150 Serial Number 2150-2247 to Current



### **Revision Sheet**

Release No.	Date	Revision Description
101513	10/15/13	Operator & Parts Manual Released
121713	12/17/13	Modified the Rotomold Warranty to 5 years.

NOTE: Specifications and parts are subject to change without notice

### Kaivac, Inc.

401 S. Third Street

Hamilton, OH 45011

## **OPERATOR & PARTS MANUAL**

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### 1.0 GETTING STARTED

### 1.1 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.) 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.) Standard Warranty (for approved non-Kaivac chemicals)
  - ♦ 1 year parts and labor
- 3.) Chemicals that have not been approved by Kaivac (If uncertain, please contact Kaivac to verify your chemical before using).
  - 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 authorized repair center. In no event shall Kaivac, Inc. be liable for incidental or consequential damages, or any damages to persons or property.

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 seller's product. Kaivac, Inc. reserves the right to make changes or improvements to its equipment without notice. Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty is in lieu of any other warranty expressed or implied, including any warranty of merchantability or fitness for a particular purpose.

#### 1.2 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: _	
☐ KV1750	☐ KV1250	☐ KV2150	☐ KV1715AC
☐ KV1715	☐ KV1215	☐ OMNIFLEX Pump Box	☐ OMNIFLEX Wet/Dry Vac
Serial Number:			
	Туре	of Business	
<ul><li>☐ School/University</li><li>☐ Hospital/Health Care</li></ul>	☐ Contra ☐ Indust	act Cleaner trial	□ Office □ Other:
	Intended Uses	(check all that apply)	
Restroom Cleaning	<u> </u>	ound Machines	☐ Classroom Cleaning
<ul><li>☐ Floor Stripping</li><li>☐ Kitchen Cleaning</li><li>☐ Carpet Extraction</li></ul>	☐ Stairwell Cle ☐ Lockers & S ☐ Hallway Cle	Showers	☐ Other: ☐ ☐

Thank you for registering for our warranty program.

Please return completed forms to:

Kaivac, Inc. 401 S. Third Street Hamilton, OH 45011 Or Fax to: (513) 887-4601



### 1.3 SAFETY PRECAUTIONS

### IMPORTANT SAFETY INSTRUCTIONS—SAVE THESE INSTRUCTIONS

**A** 

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 connections 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.
- ♦ 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.

### **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 and risk of electric shock. It must be maintained and tested regularly. An equipment grounding cord and plug is included with the unit. Cutting off the ground wire or using a cord with an ungrounded plug will void the warranty on the Kaivac.

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 into the outlet, have a properly grounded outlet installed by a qualified electrician.

## ▲ 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.
- Do not use to pick up flammable or combustible materials.
- ♦ Follow the maintenance instructions specified in the manual.

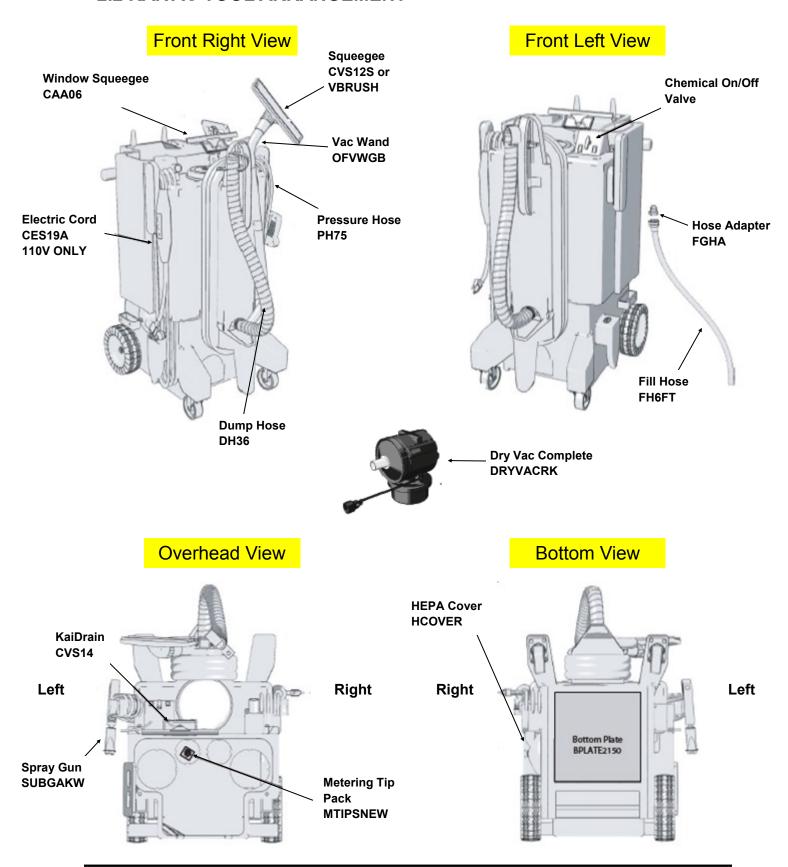
**Personal Protective Equipment (PPE):** It is recommended to wear proper personal protective equipment as required by the chemical product label instructions used in conjunction with the Kaivac.

### FOR INDOOR USE ONLY

### 2.1 PREPARING YOUR KAIVAC FOR USE

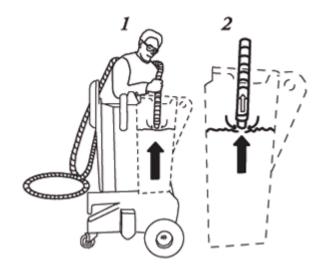
1.	Fill machine with clean, cool water.	
2.	Prepare the cleaning solution you will be using by attaching the chemical feed line and cap to the top of your chemical bottle and selecting the proper metering tip. (See placard for metering tip information)	
3.	Check machine for all tools and supplies needed to complete task. See "Tool Arrangement" in Section 2.2 of this manual.	
4.	If using a cleaning product that has high foaming use a foam inhibitor to cut down on foam. Pour 2 capfuls of inhibitor in the vac hose with vac running to coat inside of hose.	VAC SWITCH ON BURBLE PLETTE
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.	Reset

### 2.2 KAIVAC TOOL ARRANGEMENT



### 2.3 VAC TANK & HOSE CLEANOUT INSTRUCTIONS

- 1. Unwrap vac hose and lay it on floor.
- Suck water and air from water tank.
   Lower hose end to surface of water gulping both air and water. This action flushes soils from line and quickly empties water tank.

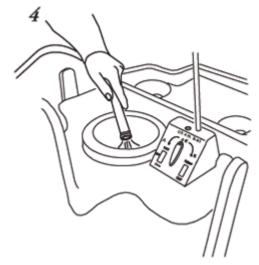


\*Dry vac hose by connecting hose ends to vac motor, then discharge air into vac tank



- 3. Vac hose can now be wrapped onto machine. Leave vac motor running while wrapping to avoid water dripping from end of hose. To completely dry hose leave vac motor running for about 3 minutes.
- 4. With Dump Hose opened to floor drain, spray inside of vac tank with clean water moving hose in a circular pattern to insure tank walls and float shutoff are rinsed.





Tank and Hose Cleaning

#### 2.4 S.I.M.P.L.E PROCESS

\*Applicable to all units, KV1700 Series shown for illustration.

Fill with clean, cool water

 $S_{\text{et-up}}$ 



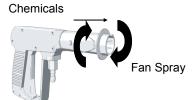
Add 1 cap of KaiDri (for spot-free rinsing)



Select metering tip and insert into cap barb



nject



**LOW Pressure Mode** 



Fan Spray



Manual

Brush



Manually brush heavily soiled areas





wash and rinse



**HIGH Pressure Mode** 







**\_**00p







 $\mathsf{E}_{\mathsf{xtract}}$ 







### 3.1 **MACHINE MAINTENANCE**



▲ CAUTION Always make sure machine is unplugged before lifting electric cover assembly

## Item

## Procedure

Floor	Check condition of squeegee blades and wheels on the floor tool.
Squeegee	Rough floor surfaces will cause the blades and wheels to wear out more quickly. Replace as necessary
Spray Gun	<ul> <li>Check spray pattern. If spray pattern will not pinpoint, clean orifice by removing it with an Allen wrench and flushing. Replace if needed.</li> <li>If nozzle becomes difficult to move from high to low pressure lubricate nozzle with lithium grease.</li> </ul>
Pressure	Wipe clean after each use.
Hose	Check for cuts or frays in the hose jacket, particularly at the end of the fittings. Replace hose if cuts are found
Water	Check condition of filter in water tank. Clean as needed.
Tank	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.
	Clean and disinfect.
	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.
	Discontinue use until leaks are repaired
Electrical System	The ground fault circuit interrupter (GFCI) must be tested before each use.
	Electric cord must be inspected for tears or cuts in the insulation.
Vacuum Wand	Use a wire brush or coarse brush with acid cleaner or other 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

### 3.2 TROUBLESHOOTING

▲ CAUTION Always make sure machine's unplugged before lifting electric cover assembly

Area	Problem	Possible Cause	Solution
		Machine not plugged in	Plug machine in
		Switch not "on"	Check switches for "on"
	No Power to pump or	GFCI tripped	Test and reset GFCI
	vac motor	Building circuit overloaded	Check and reset circuit
Electrical		Switch wires loose	Disconnect power and check for loose wire
		Connections loose	Disconnect Power and check for loose wire under panel
		Vac motor brushes worn	Remove vac motor and repair
	Electrical burning smell	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
		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
	No / Weak vacuum	Damaged hose	Cut and repair/replace
		Dump hose plug missing	Contact dealer and replace
\/		Access lid not tight	Tighten lid hand tight
Vacuum System		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	Remove HEPA filter and clean
		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	Vac tank full	Dump vac tank
	exhaust	Float shutoff missing	Replace
		Excessive foam in vac tank	Use defoamer
	No air flow	Hose disconnected	Reconnect hose
Blow Dry System	Moisture from nozzle	Water in blow hose	Dry blow line
	Suction, not blow action	Vacuum hose connected to vac tank	Reconnect to vac motor exhaust hose

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

Area	Problem	Possible Cause	Solution
	Not enough chemical	Metering tip plugged	Remove and clean
		Wrong metering tip	Check and replace per chart
Chemical Injection System continued	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 hose will not empty tank	Dump hose cap not removed	Remove cap
		Clog in bottom of tank	Tip dump contents, remove debris
Dump System		Hose cut	If leak is less than 4" from tank side, cut and reattach, or replace
	Dump hose leaks	Clamp loose	Tighten hose clamp
		Dump cap missing	Replace cap
		Flat tires	Inflate tires to 30 p. s. i.
	Wheels won't roll, or they rub	Debris wrapped around axle	Check for debris on axle
Wheels and Casters		Bearings tight	Grease bearings
		Wheels too loose on axle	Remove wheel, add washers to take up slack
		Bearings falling out	Replace bearing assembly
	Floor streaks	Worn blades or wheels	Replace wheels and / or blades
	Squeegee head doesn't easily rotate when installed on wand	Brass ring on wand not in groove	Loosen coupling nut and re-position head on groove
Squeegee Head		Coupling nut too tight	Loosen 1 / 2 turn
	Head won't 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

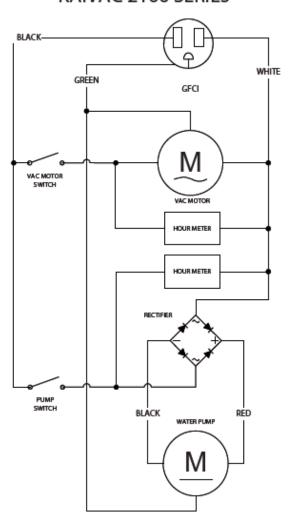
### 3.3 PUMP & ELECTRICAL DIAGRAM

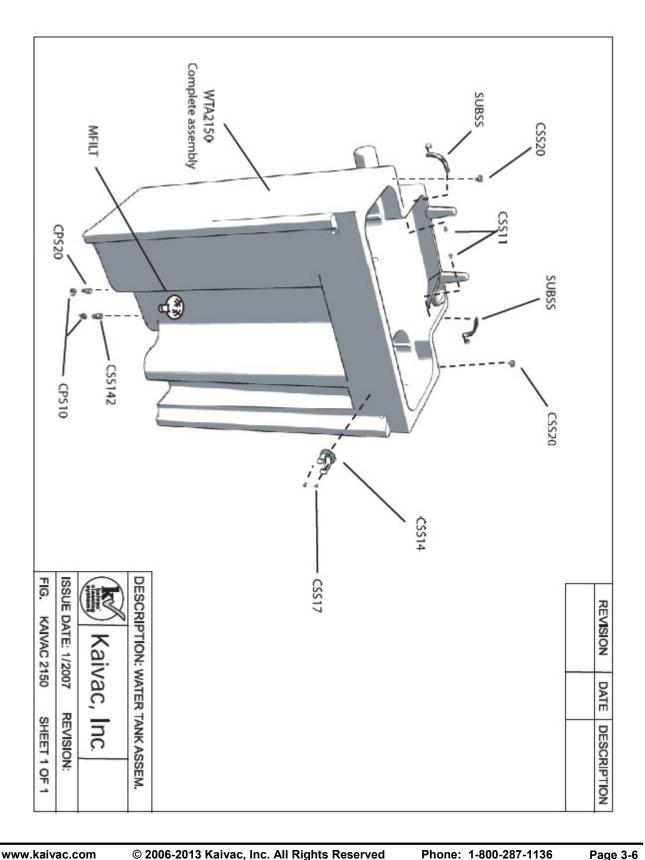
# Schematic Diagrams Kaivac 2100 series

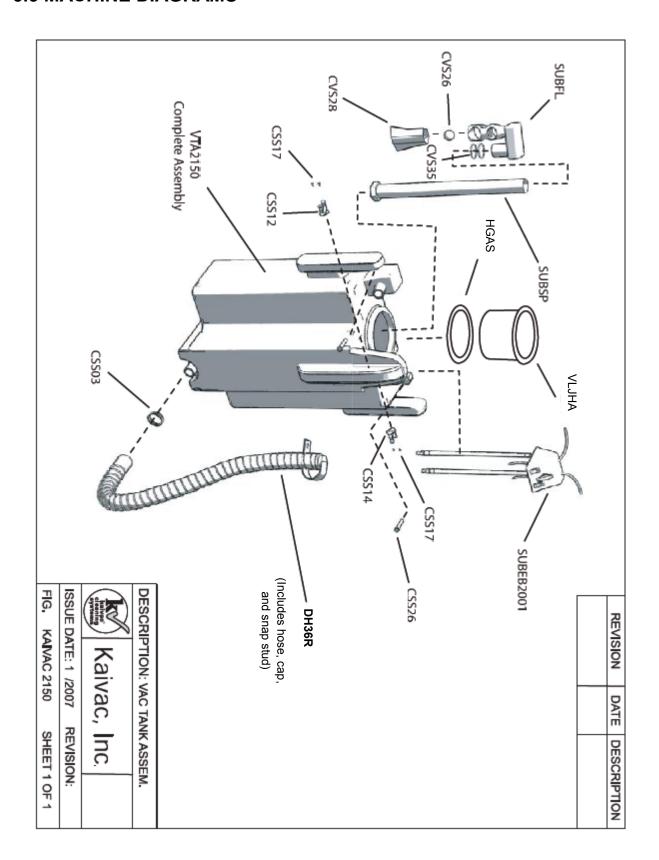
### PUMP DIAGRAM KAIVAC 2100 SERIES

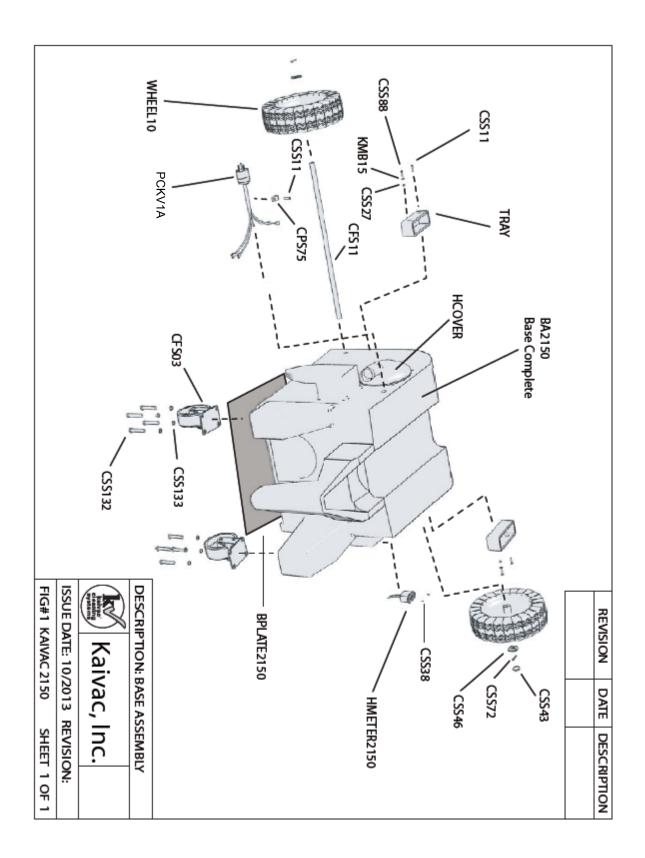
### CHEMICAL CHEMICAL CAP CHEMICAL CAP CHEMICAL METERING TIP CHECK VALVE METERING TIP CHECK VALVE CHEMICAL CHEMICAL CAP CAP DRAW CHEMICAL DRAW TURE TURE VALVE CHEMICAL CHEMICAL **BOTTLE A** BOTTLE B NOTE: CHEMICAL B ONLY APPLIES TO DUAL CHEMICAL CONFIGURATIONS WATER TANK CHEMICAL PULSE HOSE INJECTOR w/ CHECK VALVE FILTER PRESSURE PRESS, HOSE UNLOADER SPRAY NOZZLE UNLOADER SPRAY GUN BLACK BOX COMPARTMENT

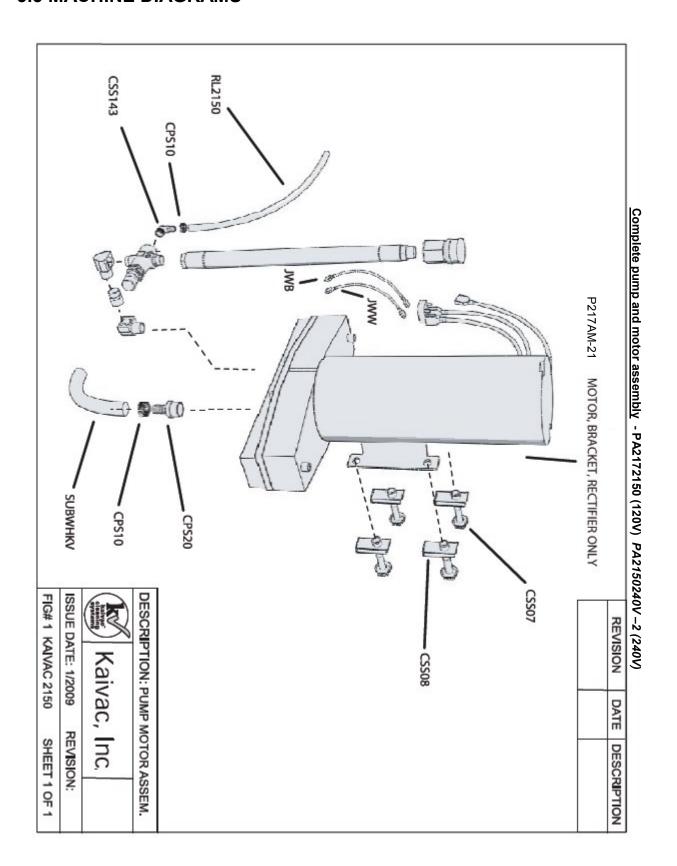
### WIRING DIAGRAM KAIVAC 2100 SERIES

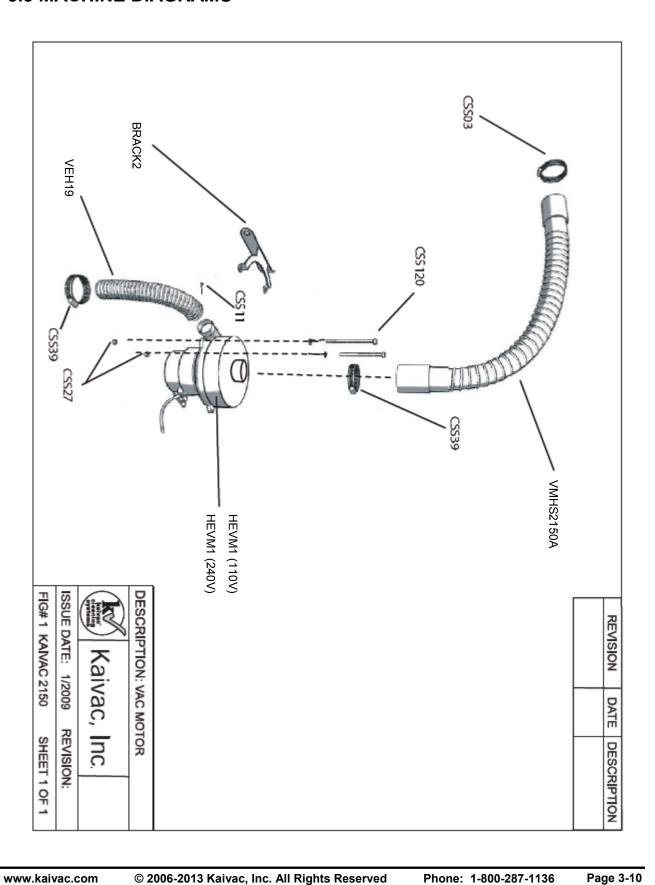


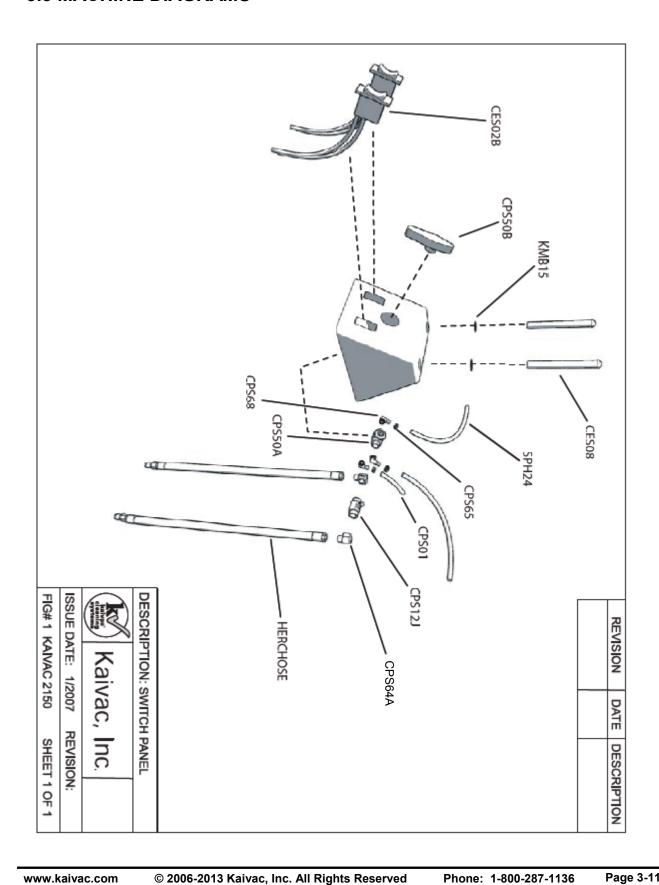




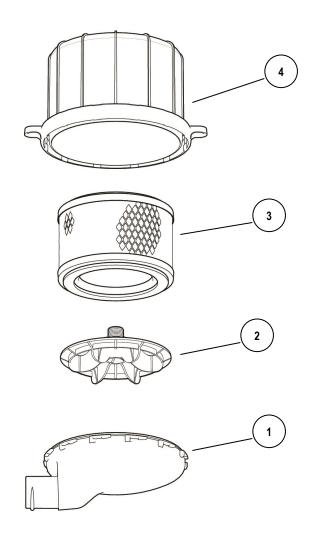




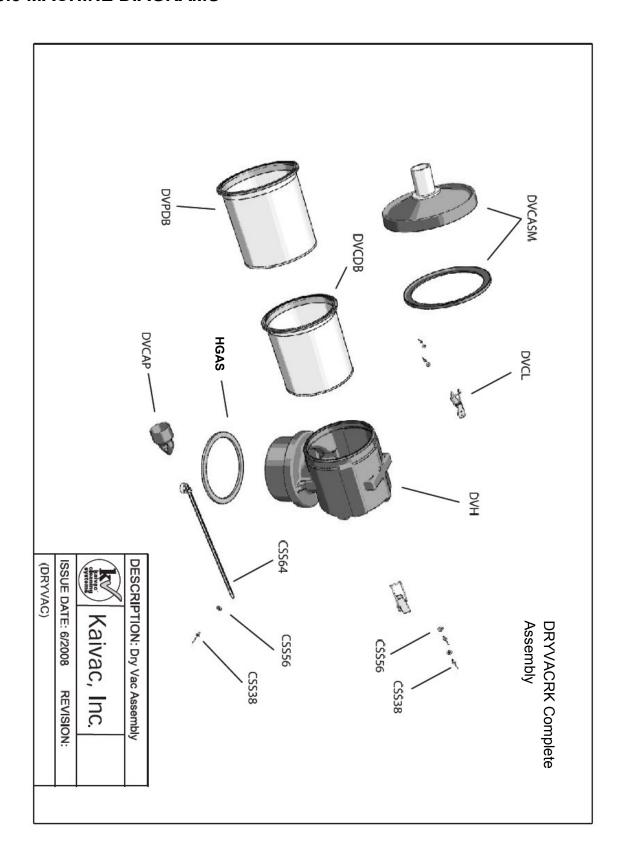




## HEPA HOUSING ASSEMBLY (HEPAHA2)



#	PART NO.	PART DESCRIPTION
1	HCOVER	HEPA COVER
2	FKEEP2	HEPA FILTER KEEPER
3	HEPA	HEPA FILTER
4	HEPAH2	HEPA FILTER HOUSING



BASE ASSEMBLY KV2150 (BA2150)	
3 /	
BASE2150 - BASE FOR 2150 WITH HEPA ASSEMBLY	1
CFS11 - AXLE 5/8 DIA X 23 IN	1
WHEEL10 - FLAT FREE TIRE 10IN 5/8 HUB	2
CSS72 - COTTER PIN 1/8 DIA X 11/4 LG	2
CSS43 - 5/8 PUSH CAP NUT	2
CSS46 - 5/8 STEEL WASHER	2
CFS03 - 5 IN CASTER , MOUNTING PLATE	2
CSS132 - 5/16-18X1 BUTTON HEAD	8
CSS133 - 5/16 SPLIT LOCK WASHER 300 SS	8
KMB16 - 3/8 SST FLAT WASHER	8
WATER TANK ASSEMBLY KV2150 (WTA2150)	
CFS06 - WATER TANK YELLOW ASSEMBLY	1
MFILT - MUSHROOM FILTER	1
CPS20 - 3/8 NPT X 1/2 BRASS HOSE BARB	1
CSS142 - 3/8 INCH BRASS HOSE BARB	1
NFSIL - NFSI LABEL	1
OMLAB2 - OMNIFLEX MAINTENANCE LABEL BLADES	1
DH36 - 36" X 1.5" DUMP HOSE 2" CUFF	1
CSS03 - 1 9/16 - 2 1/2 HOSE CLAMP	1
CSS12 - 15 CLAMP , FOR DUMP HOSE	1
CSS14 - 13 CLAMP , FOR TOOLS	2
CSS17 - NO 8 FLAT HEAD SQUARE SCREW	6
SUBSS - WRAP AND SNAP	2
CSS20 - SNAP STUD	2
VAC TANK ASSEMBLY KV2150 (VTA2150)	
CFS05 - VACUUM TANK ASSEMBLY	1
SUBFL - FLOAT SHUT-OFF SUBASSEMBLY	1
CVS32 - FLOAT SHUT OFF BODY	1
CVS31 - #54 SPINWELD FITTING FOR FLOAT	1
CVS28 - FILTER BAG	1
CSS63 - TIE WRAP FOR FLOAT	1
CVS26 - 2 IN DIA PLASTIC BALL	1
CVS35 - AS568A-219 BUNA N O RING	2

PART NUMBER - DESCRIPTION	QTY
CONT. FOR TANK ASSEMBLIES	
CSS57 - 3/8 X 3/4 LNG SST SCREW	5
CSS49 - 5/16 FLAT WASHER	1
CSS26 - 3/8 X 1 1/2 LONG CAPSCREW	2
CSS51 - 3/8 WASHERS	3
CSS48 - 3/8 SST LARGE OD WASHER	1
CPS70 - HOSE TIE DOWN , BLACK	1
CSS11 - NO 10 X 3/4 SELF DRILLING	1
VAC MOTOR ASSEMBLY (VMA2150 (110V), VMA3S240V (240V)	1
HEVM1 - HIGH EFFICIENCY 120V VAC MOTOR	
HEVM1240V—HIGH EFF VAC MOTOR 240V	1
CSS203 - HEX HEAD BOLT 1/4 20 X 1 1/4	2
CSS44 - 1/4 FLAT WASHER	2
BRACK2 - BRACKET FOR BLOW MOTOR ON 2150	1
CSS08 - 5/16-18 U-NUT	2
CSS27 - 1/4 NYLOC NUT	2
VEH19 - VAC MOTOR EXHAUST HOSE 19 INCH	1
CSS39 - 1 1/16 - 2 HOSE CLAMP	1
CSS11 - NO 10 X 3/4 SELF DRILLING	4
CSS127 - QUICK DISCONNECT TERMINAL	1
CSS134 - INSULATED QUICK CONNECT	1
CES24 - 16 GAUGE BLACK WIRE	1.25
CSS127 - QUICK DISCONNECT TERMINAL	1
VMHS2150A - VAC MOTOR HOSE FOR KV2150	1
CSS127 - QUICK DISCONNECT TERMINAL	1
PUMP ASSEMBLY (PA2172150 (110V), PA2150240V-2 (240V)	1
P217AM-21 - 2150 PUMP SERIES 217V-110/M9253F	
PUMP217240VDC—PUMP SERIES 217V-095/M11 240V	1
SUBWHKV - WATER LINE FOR KV2150	1
RL2150 - RETURN LINE FOR 2150	1
CSS08 - 5/16-18 U-NUT	2
JWW - JUMPER WIRE WHITE 12 IN	1
CSS127 - QUICK DISCONNECT TERMINAL	1
CSS64 - TIE WRAP FOR FILTERS	1

PART NUMBER - DESCRIPTION	QTY
ELECTRIC BOX ASSEM. (SUBEB2001)	1
CES02B - ROCKER SWITCH WITH LEADS	2
HERCHOSE - HERCULES HOSE ASSEMBLY	2
CPS64A - 90 DEG. 3/8 M X 3/8 F	2
CPS12J - CHEMICAL INJECTOR	1
CPS01 - 1/4 BRAIDED HOSE	0.17
SPH24 - ELEC BOX CHEMICAL HOSE 24 IN	2
CPS65 - 1/2 IN CLAMP	5
CSS21 - SNAP GRIP HOSE CLAMP SIZE D	1
CPS68 - 90 DEG. 1/8 NPT MALE X	3
CPS50A - 3 WAY BRASS VALVE WITH VITON SEAL	1
CES09 - ELECTRIC BOX TYPE 3 CURRENT	1
CES08 - 1/4-20 X 4 SCREW	2
KMB15 - 1/4 SST FLAT WASHER	2
CES16 - 12 GAUGE BLACK WIRE	6.25
CSS134 - INSULATED QUICK CONNECT	1
CES15 - 12 GAUGE RED WIRE	6.25
CSS127 - QUICK DISCONNECT TERMINAL	1
CES17 - 12 GAUGE BLUE WIRE	6.25
CSS127 - QUICK DISCONNECT TERMINAL	1
CSS138 - 12-10 3-WAY INSULATED SPLICE V	1
CSS139 - 12-10 BUTT SLICE	2
CSS140 - 1/2 INCH HEAT SHRINK TUBING	0.167
CSS29 - PERMATEX 14D THREAD SEALANT	0.01
CPS25 - TEFLON TAPE	0.1

PART NUMBER - DESCRIPTION	QTY
STANDPIPE SUBASSEMBLY (SUBSP)	1
CVS03 - 1 1/2 PIPE THREAD TO PVC	1
CSS28 - TREMCO CLEAR RTV SILICONE SEALANT	0.2
CVS04 - 1 1/2 PVC PIPE	1.792
CSS24 - PVC CEMENT	0.01
CSS25 - PVC CLEANER	0.01
CVS22 - ABS P-TRAP ADAPTER	1
CVS34 - COMPRESSION MEMBER ANGLE	1
CSS26 - 3/8 X 1 1/2 LONG CAPSCREW	1
CSS49 - 5/16 FLAT WASHER	1
CSS53 - 3/8 RUBBER WASHER	1
CSS54 - 3/8 HEX NUT	1
COMPRESSION MEMBER PIPE (SUBCMP)	1
CFS12 - 1 1/4 PVC PIPE SCHED 40	1.125
CVS05 - 1 INCH PVC PIPE	0.34
CVS02 - 1 INCH PVC CAP	1
CSS24 - PVC CEMENT	0.01
CSS25 - PVC CLEANER	0.01
VAC LID , JUG HOLDER ASSEMEMBLY KV2150 (VLJHA)	
VLJH - VAC LID , JUG HOLDER	1
HGAS - HEPA BLOW COVER GASKET	1
HEPA HOUSING ASSEMBLY (HEPAHA2)	
HEPAH2 - HEPA FILTER HOUSING	1 1
HEPA - HEPA FILTER	1 1
FKEEP2 - HEPA FILTER KEEPER	1 1
HCOVER - HEPA COVER	1

PART NUMBER - DESCRIPTION	QTY
MISC. PARTS & ACCESSORIES FOR 2150	
FIG8LABEL - FIGURE 8 LABEL 1-1/4 X 3-1/4	1
CSS17A - 8 SST SCREW 3/4	2
HEPAHA2 - HEPA HOUSING ASSEMBLY	1
HEPALAB - HEPA WARNING LABEL	1
GR2 - KAIVAC CLEANING SYSTEMS STICKER	1
HMETER2150 - 2 HOLE DIGITAL HOUR METER	1
CSS38 - 1/8 X 1/4 ALUMINUM RIVETS	2
SERIALLABEL - SERIAL NUMBER LABEL	1
SP2150 - SERIAL PLATE 2150 SERIES	1
CSS38 - 1/8 X 1/4 ALUMINUM RIVETS	4
CES19A - 50 FT IN LINE GFCI 12,3 YELLOW	1
PH75 - PRESSURE HOSE ASSEM 75 FT	1
CSS03 - 1 9/16 - 2 1/2 HOSE CLAMP	1
CSS07 - 5/16-18 X 1 HEX HEAD	4
CSS07 - 5/16-18 X 1 HEX HEAD	2
PCKV1A - POWER CORD MOLDED W/ GROMMET	1
CPS75 - CABLE CLAMP FOR EXT. CORD	1
CSS11 - NO 10 X 3/4 SELF DRILLING	1
JWW - JUMPER WIRE WHITE 12 IN	1
JWW - JUMPER WIRE WHITE 12 IN	1
CSS63 - TIE WRAP FOR FLOAT	1
CSS136 - 6 NATURAL CABLE TIE	1
BPLATE2150 - BOTTOM PLATE FOR KV2150	1
CSS17A - 8 SST SCREW 3/4	6
SUBGAKW - PRESSURE GUN GREEN DOT	1
MTIPSNEW - METERING TIP PACK	1
CHCAPA - CHEM CAP W/SAFETY CHECK VALVE AND SCREEN	1
FH6FT - FILL HOSE 6 FT	1
CSS114 - NYLON SNAP GRIP CLAMP SIZE F	1
2150ACC - KV2150 ACCESSORY KIT	1

PART NUMBER - DESCRIPTION	QTY
2150 ACCESSORY KIT (2150ACC)	
VHKVJRST - BLACK STRETCH VAC HOSE W/ BLACK CUFFS	1
HC5 - HOSE CONNECTOR	1
VH40 - VAC HOSE 40 FT	1
FGHA - FAUCET TO GARDEN HOSE ADAPTER	1
PLCRD - PLACARD FOR 1200 1700 2100 SERIES UNITS	1
TBAG - TOTE BAG	1
MANUAL2150 - MANUAL FOR KV2150	1
KTDVD - KAITUTOR TRAINING DVD DISK	1
QS2150 - QUICK START CD FOR 2150	1
DRWED - DOOR WEDGIE	1
CVS14 - KAIDRAIN GULPER TOOL	1
CVS13 - BLOW NOZZLE	1
CAA06 - WINDOW SQUEEGEE COMPLETE	1
SUBBLHSST - 33 FT BLOW HOSE	1
OFVWGB - VAC WAND W/ CLIP, STRAP, & GRTBRUSH	1
VBRUSH - SQUEEGEE HEAD BRUSH COMPLETE	1
CVS12S - 14.5 SQUEEGEE HEAD WITH SS WHEELS	1
STF - SMART TOWEL FLYER	1
STY12 - MFIBER SMART TOWEL YELLOW 12/CS	0.083